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BUSINESS WEEK

A MCGRAW-HILL PUBLICATION

TWENTY-FIVE CENTS

JUNE 22, 1957



To fill out its structure, Ford has under wraps a new management man, James J. Nance, and a new car, the Edsel.
(Marketing)

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**MORRISON-KNUDSEN
COMPANY, INC.**

LEADER IN INTERNATIONAL
HEAVY CONSTRUCTION AND ENGINEERING



**"National Accounting machines save us \$116,400 a year...
return 90% on our investment!"**

—MORRISON-KNUDSEN COMPANY, INC., Boise, Idaho

"Our heavy construction and engineering business is international in scope, employing more than 40,000 people. We have placed 32 National Accounting machines on field construction projects, and in our home office and branch offices.

"The machines are used for accounts payable, payrolls, processing earnings records, preparing Federal and State reports, writing W-2's, and posting detail cost ledgers.

"The flexibility of these Nationals permits switching quickly from one job to another, thus increasing the utility of these machines. We also appreciate their rugged construction

and the minimum of service required, as most of our jobs are located in isolated areas many hours from National Service offices. And the simple operation and programming of these machines is advantageous in training personnel quickly to use these machines on relatively short-term field jobs.

"We estimate that these National Accounting machines save us \$116,400 a year, a 90% annual return on our investment."

Norman Jones

Controller, Morrison-Knudsen Company, Inc., Boise, Idaho

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO
989 OFFICES IN 94 COUNTRIES

In your business, too, National machines will pay for themselves with the money they save, then continue savings as annual profit. Your nearby National man will gladly show how much you can save—and why your operators will be happier. He's listed in the yellow pages of your phone book.

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ACCOUNTING MACHINES
CASH REGISTERS • ADDING MACHINES

GENERAL BUSINESS

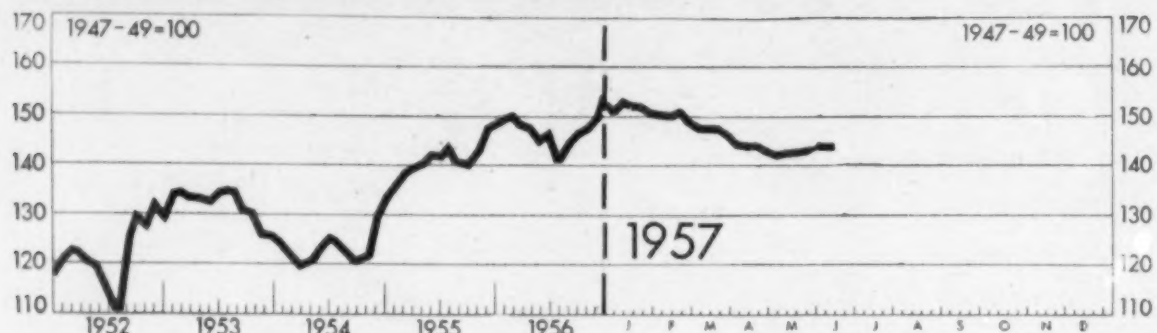
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BUSINESS WEEK INDEX (chart)

1946 Average	Year Ago	Month Ago	Week Ago	5 Latest Week
91.6	147.8	143.5	†144.5	*144.5

PRODUCTION

Steel ingot (thous. of tons).....	1,281	2,290	2,212	†2,214	2,240
Automobiles and trucks.....	62,880	133,571	162,538	†163,438	156,084
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.).....	\$17,083	\$76,880	\$64,909	\$65,140	\$66,528
Electric power (millions of kilowatt-hours).....	4,238	11,425	11,519	11,550	11,958
Crude oil and condensate (daily av., thous. of bbls.).....	4,751	7,066	7,511	7,338	7,294
Bituminous coal (daily av., thous. of tons).....	1,745	1,617	1,614	1,618	1,670
Paperboard (tons).....	167,269	289,328	286,720	263,469	287,444

TRADE

Carloadings: miscellaneous and l.c.l. (daily av., thous. of cars).....	82	74	68	67	67
Carloadings: all others (daily av., thous. of cars).....	53	57	53	54	55
Department store sales index (1947-49 = 100, not seasonally adjusted).....	90	124	133	110	124
Business failures (Dun & Bradstreet, number).....	22	286	264	289	265

PRICES

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	311.9	413.8	411.6	426.0	426.0
Industrial raw materials, daily index (BLS, 1947-49 = 100).....	††73.2	93.8	92.5	93.5	93.4
Foodstuffs, daily index (BLS, 1947-49 = 100).....	††75.4	80.8	81.3	84.5	84.1
Print cloth (spot and nearby, yd.).....	17.5¢	18.9¢	17.9¢	17.9¢	17.9¢
Finished steel, index (BLS, 1947-49 = 100).....	††76.4	158.2	174.4	174.3	174.3
Scrap steel composite (Iron Age, ton).....	\$20.27	\$44.83	\$47.17	\$54.83	\$56.17
Copper (electrolytic, delivered price, E & M J, lb.).....	14.045¢	45.275¢	31.760¢	31.770¢	31.155¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$1.97	\$2.09	\$2.25	\$2.20	\$2.24
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	**30.56¢	36.37¢	33.90¢	33.95¢	33.99¢
Wool tops (Boston, lb.).....	\$1.51	\$1.77	\$2.22	\$2.22	\$2.22

FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	17.08	46.30	47.18	47.73	48.01
Medium grade corporate bond yield (Baa issues, Moody's).....	3.05%	3.75%	4.53%	4.61%	4.64%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	¾-1%	3%	3%	3%	3%

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	††45,820	56,974	55,057	55,320	56,448
Total loans and investments, reporting member banks.....	††71,916	85,236	85,905	86,210	86,754
Commercial and agricultural loans, reporting member banks.....	††9,299	28,258	31,569	31,170	31,519
U. S. gov't guaranteed obligations held, reporting member banks.....	††49,879	26,745	25,221	25,790	25,690
Total federal reserve credit outstanding.....	23,888	25,251	25,031	24,987	24,988

MONTHLY FIGURES OF THE WEEK

	1946 Average	Year Ago	Month Ago	Latest Month
Personal income (seasonally adjusted, in billions)..... May.....	\$178.0	\$322.8	\$339.3	\$340.4
Farm income (seasonally adjusted, in billions)..... May.....	\$16.9	\$15.2	\$15.3	\$15.3
Bank debits (in millions)..... May.....	††\$85,577	\$185,584	\$192,628	\$197,181
Imports (in millions)..... April.....	\$412	\$992	\$1,131	\$1,118

* Preliminary, week ended June 15, 1957.
† Revised.

†† Estimates.
** Ten designated markets, middling ½ in.

‡ Data for 'Latest Week' on each series on request.

THE PICTURES—cover—Gene Pyle; CBS—34; Canadair, Ltd.—102; Grant Compton—23, 24, 169; Richard Dean—94, 95; Federated Department Stores—65; INP—126; K-W Mfg. Co.—102; Herb Kratochvil—66, 67; Masters—65; Bill Mutschmann—178, 179; Leonard Nadel—76, 77; North American Aviation—87; Tom O'Reilly—30, 31; Gene Pyle—45, 53; Dan Weiner—134, 135, 136, 138.

B.F. Goodrich report:



Men with hose are changing the shape of the earth

B. F. Goodrich improvements in rubber brought extra savings

Problem: Those workmen are drilling holes for dynamite charges that will blast solid rock to pieces. They're at work on the St. Lawrence Seaway, where the shape of the earth is being changed, so that ocean-going ships can reach the Great Lakes.

The air hose on such jobs used to go to pieces, too. When heat from the compressor got into the hose, it would harden the rubber, breaking it into loose pieces that clogged the air tool, put it out of action.

What was done: B.F. Goodrich engineers went to work on the problem. By adding, subtracting, changing propor-

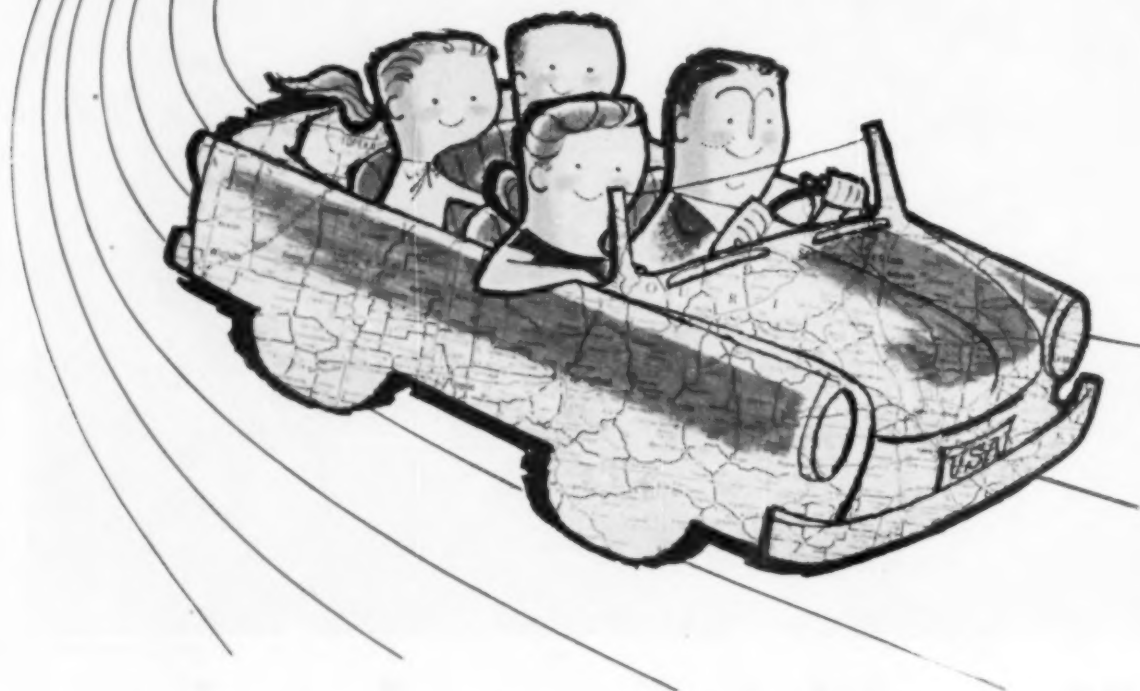
tions of rubber, they developed a special compound for the hose that stands heat without scorching or hardening. Hose lined with this new rubber was made and put to work.

Savings: On jobs where air hose used to go to pieces in weeks, B.F. Goodrich hose lasts months, even years. Thousands of feet of it are in constant use on the Seaway project, doing dozens of different jobs. The hose pictured above has been at work 6 months, is expected to last another year despite the rough treatment it gets. It is dragged over rough rocks and is often run over by trucks.

Where to buy: Your B.F. Goodrich distributor has exact specifications for the B.F. Goodrich air hose described here. And, as a factory-trained specialist in rubber products, he can answer your questions about all the rubber products B.F. Goodrich makes for industry. B.F. Goodrich Industrial Products Co., Dept. M-983, Akron 18, Ohio.

B.F. Goodrich
INDUSTRIAL PRODUCTS

TURNPIKE TOURISTS



The smiling faces in our little cartoon reflect the merry mood of motorists parading along America's new high-speed highways.

When it appeared on the cover of a recent issue of **PARADE**, it led 8 out of 10 to read the accompanying story describing America's vast new turnpike network.

Each week **PARADE**'s pages are filled with enlightening, provocative and timely features. The kind that make people stop, look—and remember. Small wonder that **PARADE** has now become one of the best read magazines in print.

To you as an advertiser, all this means twice as many readers for your dollar as any of the big weekday magazines.

Join the happy throng: to open new markets, to establish brand names, to build sales all week long . . . **PARADE** has what it takes!



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READERS REPORT

Too Much Nonsense

Dear Sir:

Our farm policy for too long has been characterized by nonsense rather than sense. Problems of surplus are directly attributable to legislative price fixing. It should be obvious by now that a price set at a level higher than that which would prevail in an uncontrolled market results in a surplus. The upshot is government purchase and storage of farm produce which the consumer obviously does not choose to buy. Other demonstrable effects are quota restrictions, soil banks, and innumerable schemes designed to alleviate the ills resulting from price fixing.

Production, purchase, and storage of commodities, as a rule, is nonsensical whether the items are wheat and potatoes, or buggy whips and snow shovels. No one should produce more than the consumer (taxpayer) chooses to buy, or not to buy. It is not too late to recall, or become cognizant of, the role of price in a free market—the direction of production of commodities in amounts that people choose to buy or refrain from buying, at prices they are willing to pay.

The \$5-billion allotted to farm "relief" in the current budget is a good place to economize, in the real sense of the word. Free rather than fixed prices, and the elimination of this spending should guide us in the resolution of a farm problem created by interference in the marketplace. A rational as against an emotional (political) approach is overdue.

RICHARD F. KRAWCZYK
 WEST SENeca, N. Y.

No "Cuts" Wanted

Dear Sir:

. . . In the story about industry and defense contracts [BW—May 18'57,p91], a paragraph . . . devoted to International Harvester Co. . . read: "International Harvester Co. has cut its defense business back to about 4% of its billion-dollar volume because defense profits are so slim."

This paragraph is factually inaccurate, and completely misstates our company's attitude toward defense business. The facts are:

1. International Harvester Co. has not deliberately "cut" its defense business. We are interested in defense work that we can perform, and frequently bid on such



Wherever Electricity Is

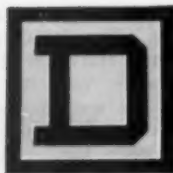
HALF-MILE CONTROL PROBLEM!

One man, stationed at a pushbutton panel, has complete electrical control of the operations in this midwest limestone mine...and that includes control of the conveyor line and the bin-loading operations a half-mile away!

In the early planning stages it appeared that DC power would be a "must" for such a control system. Several electrical equipment manufacturers confirmed that belief. Square D was called in and, working closely with engineers from both

the mining company and the conveyor manufacturer, developed an AC control system which met every requirement. In addition, it (1) eliminated the cost of generating DC power, (2) saved more than \$10,000 in installation costs, and (3) effected a continuing savings in the use of AC compared with more costly DC power.

Here, from Square D's files, is another example of the kind of teamwork which helps America *work better and live better—electrically!*



EC&M HEAVY INDUSTRY ELECTRICAL EQUIPMENT...NOW A PART OF THE SQUARE D LINE

SQUARE D COMPANY

Distributed and Controlled



Above—through this bank of pushbuttons, located within the mine, one operator can control all mining, conveying and processing operations. Notice the closed circuit TV (at left) which gives the operator a constant view of the loading bins, a half-mile away. This enables him to switch bins instantly, as they are filled.



At left one of the three Square D control centers which respond to the push-button commands of the operator shown at left. A Square D unit substation and high voltage starters also are a part of the complete system.

Field Engineering Service is available through more than one hundred Square D offices, backed by an international network of over 1000 authorized electrical distributors and 17 plants in the United States, Canada, Mexico and England.

Executive Offices • 6060 Rivard Street, Detroit 11, Michigan



Steel that goes into this bumper, being installed on one of America's fine cars, is ordered and tested to rigid specifications. The steel must be exceptionally clean, bright, flat, and with no surface defects. It must have close chemical analysis and internal qual-

ity so it will draw deeply without "orange-peel." The company installing this bumper is so careful that in the last $\frac{1}{2}$ million bumpers it has scrapped only $\frac{1}{2}$ of 1% due to metal failure! Pittsburgh Steel's sheet constantly meets these exacting specifications.

**Pittsburgh Steel's quality standards pay off
as automakers in a highly competitive market demand...**

Better Sheet Steel For Making Bumpers

Today, the makers of America's better cars are more than just critical when they specify steel for making bumpers. They realize that the broad and complex chromed areas front and back on their models must enhance the appearance of the cars if they expect to beat competition in today's tight market. They demand the best, and then test exhaustively against strict specifications to make sure they get it.

That's where Pittsburgh Steel Company shines. With its outstanding new cold rolling facilities backed

up with the latest technology, it daily produces sheet for a variety of the toughest applications. When an automaker says of its bumper stock that yield must be held to 30-33,000 psi, and elongation must be 38% before failure—that's duck soup for Pittsburgh Steel. Orders like this come from one company that prides itself on less than one-half of one percent of scrap due to metal failure in the last half-million bumpers!

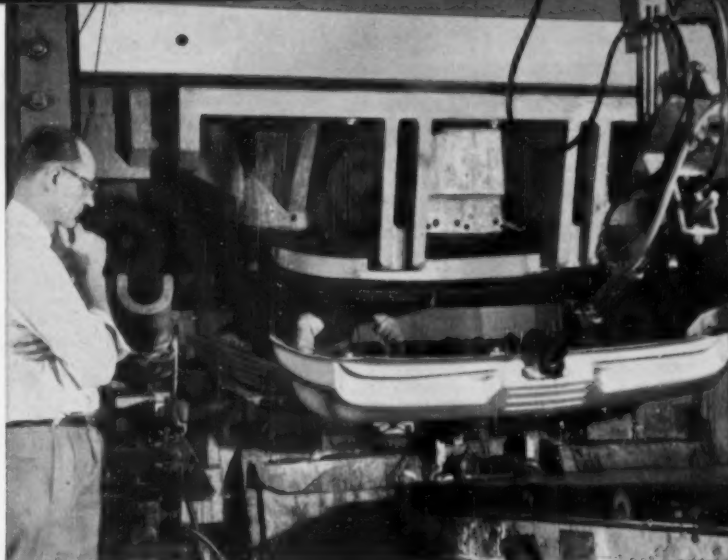
One bumper plant inspector put it this way: "We have to be especially careful to watch steel quality because,

although the draw isn't unusually deep on wrap-around bumpers, it is very critical since it involves complex bends up to 120°. And even the tiniest stretcher-strain marks or other defects would show up like a sore thumb under the bright chrome finish."

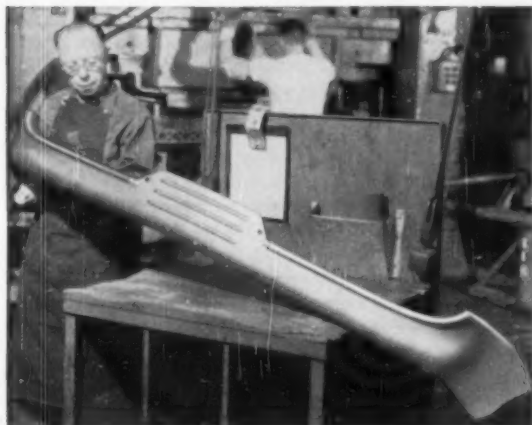
If Pittsburgh Steel's sheets can meet standards as high as these, they can help you solve your forming problems, no matter how tough they may be. When you buy from Pittsburgh Steel you can always be sure you are getting sheet that has:



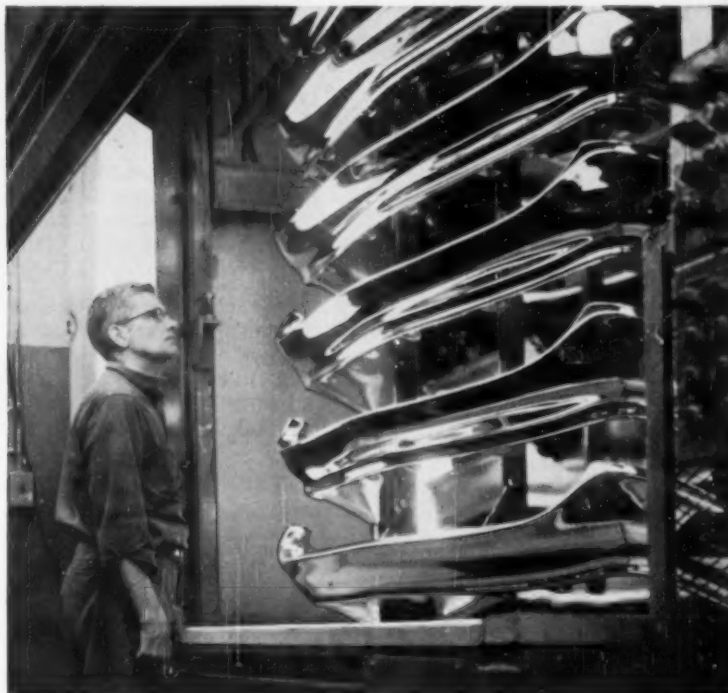
Grinding provides a surface finish which must not deviate more than 10 micro inches and since rarely more than 2% is taken off, the original sheet surface had to be excellent.



The draw of this massive press is critical since complex angles up to 120° must be achieved without steel failure. Sheet steel supplied by Pittsburgh Steel Company has excellent formability which stems from good internal quality.



After all drawing and stamping operations are complete, each bumper is carefully inspected before going to the plating line.



Each bumper gets a last close look after plating. The bright finish magnifies any defects so the surface must be perfect.

- **Superior Internal Quality**—proper uniform grain structure free from flaws and subsurface imperfections.
- **Good Surface**—clean, bright and smooth—free from scratches, pits and slivers.
- **Flat and Uniform**—consistent from sheet to sheet to save you scrap.
- **Formability**—excellent capacity to withstand deep drawing.

There is an experienced Pittsburgh Steel Company sales engineer as close to you as your telephone. He is at your service—eager to help you solve your toughest sheet problems.

Pittsburgh Steel Company

Grant Building

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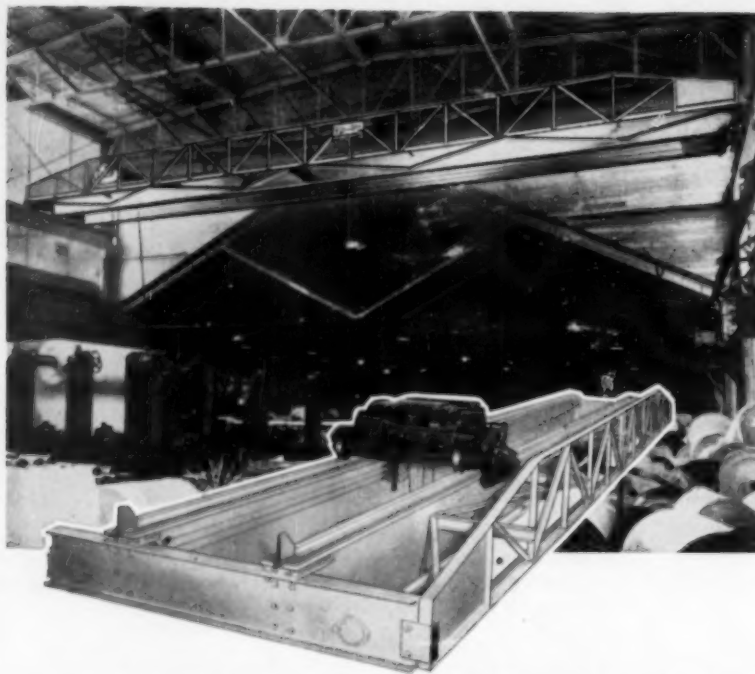
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YOU SAVE THREE WAYS WITH A CRANE LIKE THIS

Series "D" 'Load Lifter' Cranes are economical to buy, use and maintain. They are built in 1 to 20-ton capacities to meet average industrial needs, but mass production methods make them available at prices substantially lower than other cranes for the same services.

Series "D" 'Load Lifter' Cranes incorporate operational features found on only the most expensive cranes. They utilize modern construction techniques and components that eliminate needless dead weight and drag. They do not whip or skew. Consequently, whether the span is 20 feet or over 50 feet, high performance is coupled with low power consumption.

Maintenance is never a costly problem with Series "D" Cranes. All gearing operates in oil in sealed housings. Anti-friction bearings minimize wear. Rotating axles carry the bridge and trolley wheels. Long wheel bearing life is assured.

Series "D" 'Load Lifter' Cranes have positive magnetic control: push button on floor-controlled cranes; master switches on cage-controlled cranes. Whatever size, type, trolley style or span you require, you can order what you want from Catalog 221. Write for a copy and learn how much you can save with a Series "D" 'Load Lifter' Crane.



'Load Lifter' CRANES

MANNING, MAXWELL & MOORE, INC.

356 WEST BROADWAY MUSKEGON, MICHIGAN
Builders of "SHAW-BOX" and "LOAD LIFTER" Cranes, "BUDDIT" and "LOAD LIFTER" Hoists and other lifting specialties. Other Divisions produce "ASHCROFT" Gauges, "WANGDICK" Valves, "GOW-SOLIDATED" Safety and Relief Valves, "AMERICAN" and "AMERICAN-MICROSEN" Industrial Instruments, and Aircraft Products.
In Canada: Manning, Maxwell & Moore of Canada, Ltd., Avenue Road, Galt, Ontario.

work. We have not been as successful as we could wish in securing it.

2. Our 1956 volume of defense product sales was 2.4% of total sales volume.

3. The fact that defense profits are slim—and they are—has not deterred us in the past from seeking such work, and will not deter us in the future.

JOHN W. VANCE

ASST. DIRECTOR, PUBLIC RELATIONS
INTERNATIONAL HARVESTER CO.
CHICAGO, ILL.

Wrong Figure

Dear Sir:

In your In Marketing [BW—Apr.27'57,p79] . . . you state that Sears Roebuck Acceptance Corp. showed that its receivables due from customers amounted to \$959-million in 1956.

. . . the Acceptance Corp.'s annual report . . . states that since the inception, the corporation has purchased over \$204,600,000 of installment receivables and as of Jan. 31, 1957, outstandings exceed \$160-million.

It appears the item . . . in your magazine is a misquote and we are bringing it to your attention. . .

E. F. LEMKE

VICE-PRESIDENT AND TREASURER
SEARS ROEBUCK ACCEPTANCE CORP.
CHICAGO, ILL.

Wrong Impression

Dear Sir:

I am writing in reference to . . . The Bite of the GM Decision, [BW—Jun.8'57,p41] . . . particularly section "VI. What Now for GM?"

This section cannot but leave the reader with a wholly erroneous impression regarding the General Motors top management team. Through the use of terms such as "loyal opposition," "The Two Parties," and the "oversimplification" stated in the last paragraph, an impression is created that, in effect, a conflict exists in GM's top echelon. This interpretation is most unfortunate, particularly because the reputation of your publication gives weight to it.

The best refutation of such a conclusion is the record of General Motors under the present management over the past several years. Such results are not accidents—they can be accomplished only by co-operative effort.

ANTHONY DE LORENZO

VICE-PRESIDENT
GENERAL MOTORS CORP.
DETROIT, MICH.

What do giraffes have to do with High Blood Pressure?

IN ITS SEARCH for more knowledge about baffling diseases, medical science takes some strange turns. For example, doctors have gone to Africa to study the blood pressure of giraffes.

They found that it takes an unusually high pressure to pump blood from the giraffe's heart to his brain—a distance of some 14 to 15 feet. Yet, its heart and blood vessels are not under strain.

Doctors are trying to learn more about how this is accomplished for it could shed new light on the disorder affecting an estimated 6 million Americans—high blood pressure or hypertension.

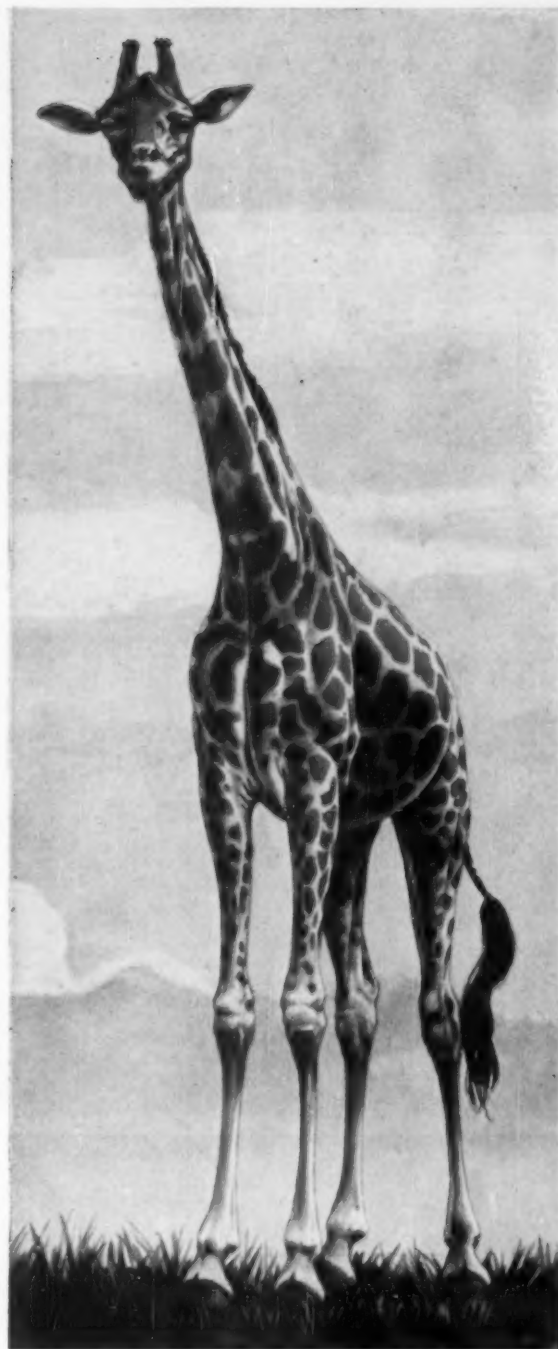
Fortunately, most cases of hypertension can be helped by proper treatment. In fact, it can often be controlled simply by relieving day-to-day emotional stresses which push blood pressure up and tend to keep it excessively elevated.

If you have hypertension, your doctor may suggest a way of life especially adapted to your needs. Among other things, he will probably recommend *plenty of rest* and *weight control*. The latter is important in treating, and possibly *preventing*, hypertension. In fact, hypertension is four times as common in overweight men as in those who are underweight.

If changes in living habits do not control this disorder, then other treatments . . . including medicines, special diets or surgery . . . may be used.

Hypertension is more easily controlled when discovered early. So, *everyone* should have periodic health examinations. Those who have reached middle age, are overweight, or whose parents or close relatives had elevated blood pressure should be especially watchful.

When hypertension is diagnosed, a patient should continue to see the doctor regularly. Then possible complications can be prevented, postponed or, if they occur, treated promptly.



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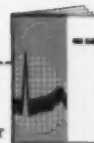
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With the help of BAKELITE Plastics:

Today's foods are grown better... keep better...taste better



Corn grows taller and more plentiful through a mulch of film made from BAKELITE Brand Polyethylene (right). Ears are much larger, too. Spread over the ground, the black-pigmented film retains soil moisture and heat, hampers weed growth, and keeps produce from touching the damp ground and rotting. Plants grow through slits in the film. Such film has now been used for two years, having repaid its cost during the first year. The same film, unpigmented, makes an excellent and inexpensive hothouse when tacked to a wood frame. Since it is also completely impervious to moisture, it is used as a liner in the "crawl space" under houses, keeping ground dampness from reaching the lower floor.



Shoppers buy 25 to 35 per cent more "Sunkist" oranges packaged in film bags made from BAKELITE Brand Polyethylene. Similarly, lemon sales are expected to rise 50 per cent. Polyethylene film keeps the fruit visible, is readily printed, and forms a strong, durable bag... "all at a lower cost than any comparable material." Housewives like the bags' reusability. Polyethylene film now packages hardware, soft goods, bakery products, and meat—hundreds of items—in today's self-service market.

And the same plastics that bring such benefits—on the farm, in processing plants, at the market and in your home—provide properties that help make products better in every industry.

Whatever your product, take your cue from the food industry. You too, may find that one of the *many* BAKELITE Brand Plastics provides the exact set of properties you need—color, chemical resistance, light weight, or flexibility, for example—in the exact combination you want. These phenolics, styrenes, impact styrenes, polyethylenes, vinyls, epoxies, and silicones offer the greatest variety of plastics and resins obtainable at one source.

And, in matching the material to your needs, you can enlist the facilities of Bakelite Company, whose long experience in plastics is unsurpassed. It is your storehouse, complete and convenient, of both materials and ideas. Draw on it when you plan to make or market better products for business, industry, or the home.



Tank linings in the food industry are under attack from fungus, abrasion, and corrosive agents. Nine years ago, these grain steep tanks were given a coating based on BAKELITE Brand Vinyl Resins. Not one cent has been spent for maintenance since. Vinyl-based coatings resist most chemicals, corrosive atmospheres, oil, and water, and can be scrubbed repeatedly without losing their color or texture. One of their biggest uses is as the lining for beer cans.

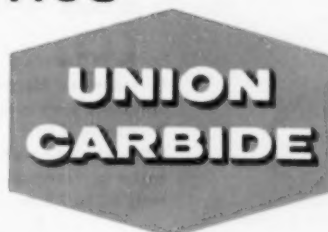


Steaks taste better when their moisture is retained. Even under refrigeration, loss of moisture can cause shrinkage and loss of color and freshness. Now, cotton fabric with a coating based on **BAKELITE** Brand Vinyl Resin is being used to wrap the entire carcass. These wrappers are used to control moisture content in beef, veal and lamb. Vinyl-based coatings are also noted for their toughness. One type, plastisol, is used to cushion-coat such familiar kitchen appliances as dish drainers and racks with a thick, soft covering that quiets clatter.

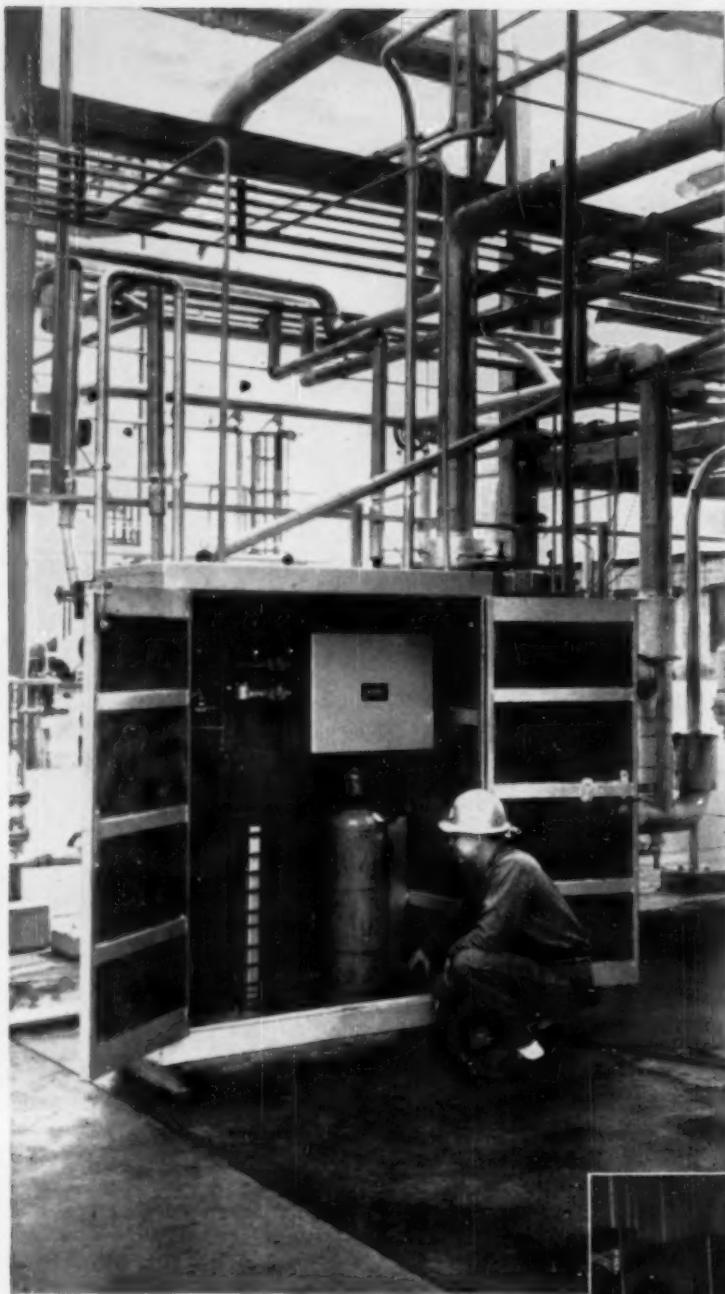
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PLASTICS

First in the world of plastics...

DID YOU KNOW: For years, the handles and knobs on kitchen utensils have been molded from **BAKELITE** Brand Phenolic Plastic. It protects against heat and keeps its color and finish throughout the roughest scullery service.



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The terms **BAKELITE**, **UNION CARBIDE** and the Trefoil Symbol are registered trade-marks of UCC.



In Paper Making

This 300-ton per day instrument-controlled hardwood kraft bleach plant in Oxford Paper Company's Rumford, Me., mill needs only one operator per shift. Instrumentation: (1) control consoles for startup; (2) graphic panel for process control; and (3) conventional panel for cost accounting recording.

In The Petroleum Industry

An *ElectroniK* instrument and a Baird Associates Plant Stream Analyzer are saving \$35,000 a year by controlling isobutane losses in producing aviation alkylate at Standard Oil Company of Ohio's Toledo refinery. This installation paid for itself in six months.

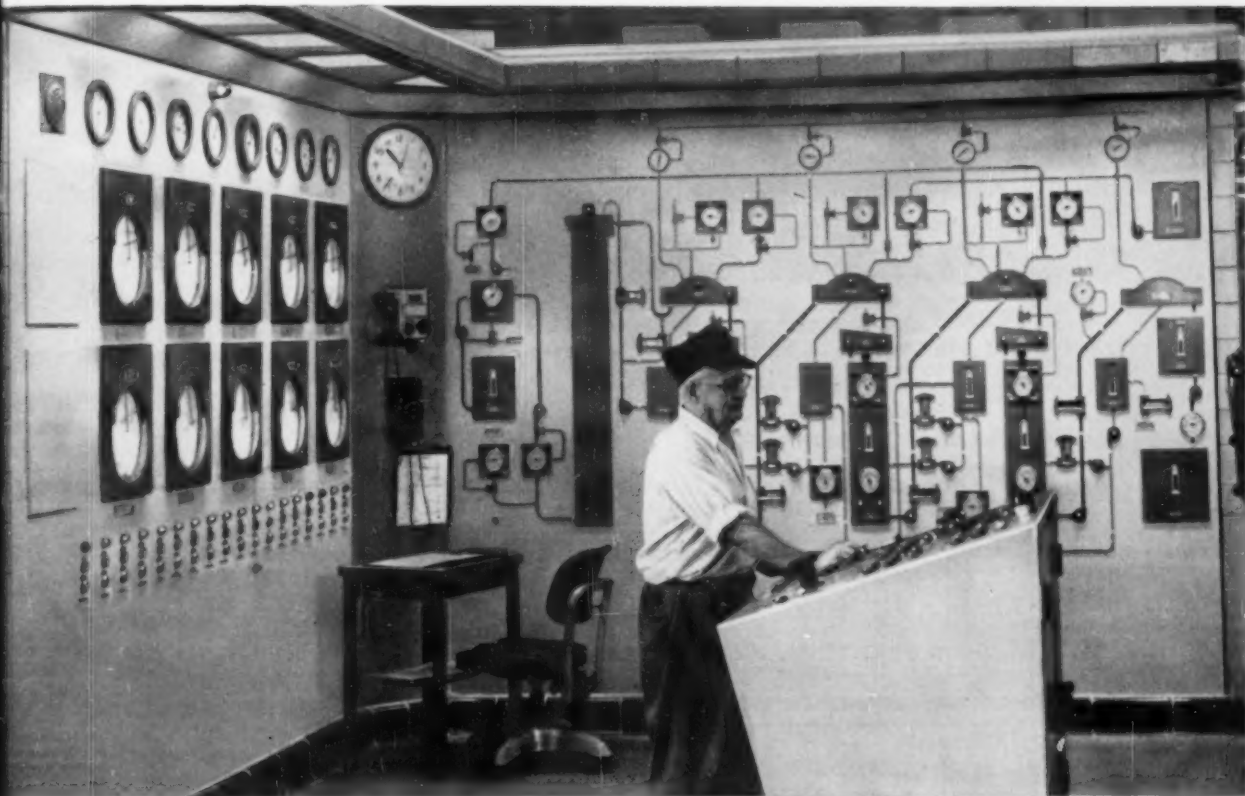
If your

reverse the

In Water Treating

A Honeywell *ElectroniK* pH controller cuts operating costs in the compressor station of Panhandle Eastern Pipe Line Company. A fully automatic method for treating cooling water at Panhandle has reduced chemical costs 50 to 75 per cent.





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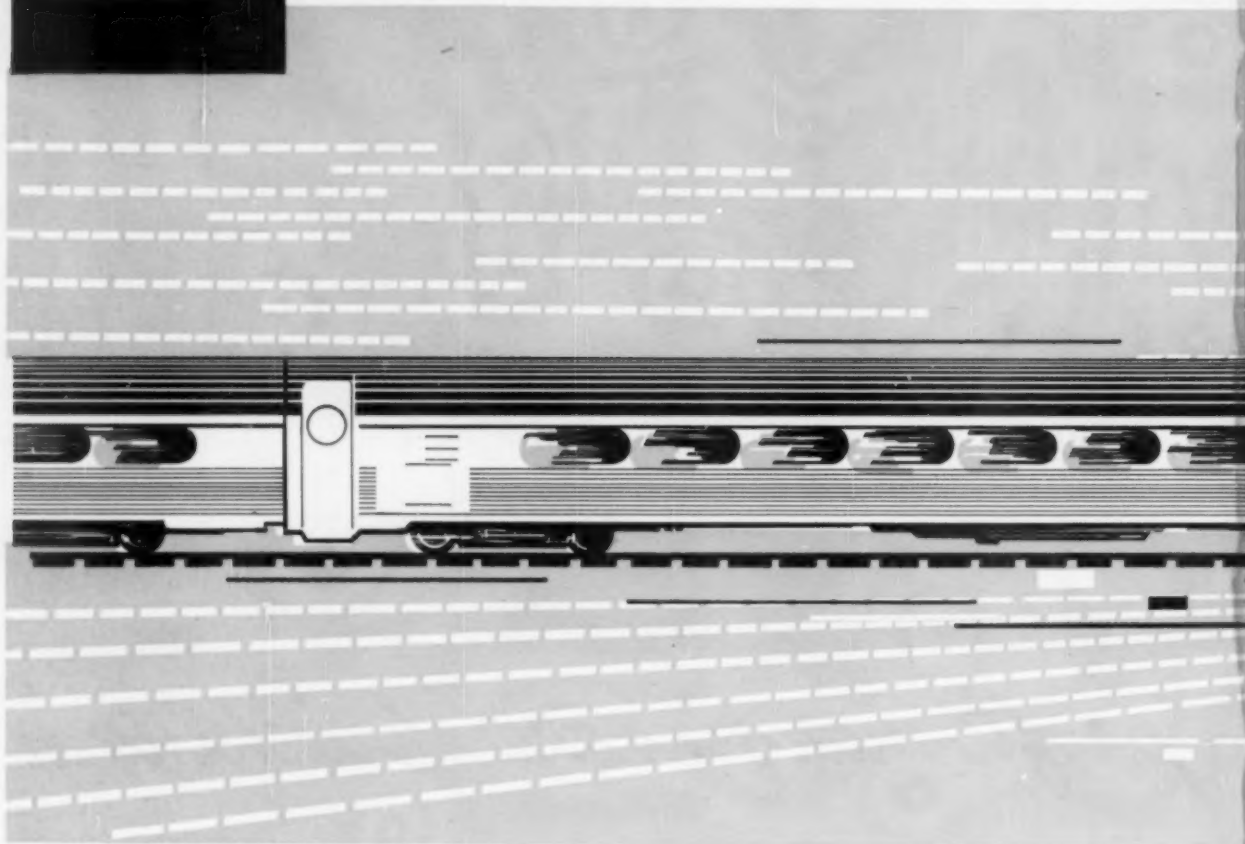
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On the Burlington's luxurious new Denver Zephyr you find the "Slumbercoach", a new, all-room, sleeping car for passengers traveling at coach fares.

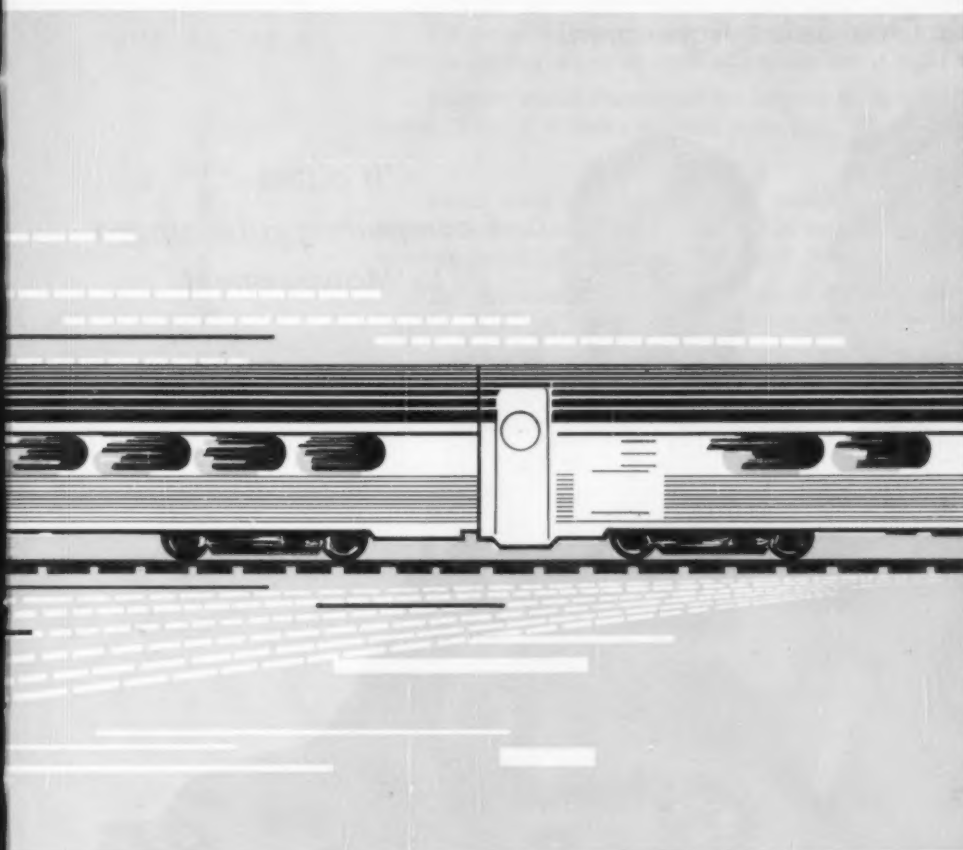
On the Santa Fe's El Capitan you find Hi-Level coaches, where everyone rides upstairs.

On the New Haven you find the Roger Williams, a high speed, low-center of gravity, six car train in which every car propels itself.

On the Pennsylvania you find the low-slung, "tubular" Keystone, and, on order, a radical new lightweight car, Pioneer III for commuter service.

All these trains are built of stainless steel. All were built by Budd.

They present many startling differences, for each was custom-designed to meet particular railroad needs. You'll enjoy riding in a modern train.



EXPANDING BUDD ACTIVITIES

Long known as the nation's largest independent producer of automobile bodies, and famous for the steel disc Budd wheel, Budd is entering other fields where its engineering and production facilities can contribute to manufacturing and scientific progress.

These include two subsidiaries, Continental-Diamond Fibre Corporation, an important supplier of vulcanized fibre, tapes and laminated plastics to the electrical, electronics and many other industries, and Tatnall Measuring Systems Company, providing new kinds of proof work called "environmental testing". Another recent development is the Nuclear Systems Division, which deals with radioactive materials and machines for radiography and the utilization of nuclear radiation in industries of all kinds.

In addition Budd is becoming increasingly active in the aviation industry, manufacturing components for jet engines, and working with manufacturers in the development of air frames of high thermal tolerance.

The Budd Company, Philadelphia 32.



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Budd

"What do you know about
Texaco's One Sales Agreement?"

"It offers
4 compelling advantages
to Management."



Many of the more profitable approaches to reduced operating costs can and should be applied to lubrication routine: (1) quantity buying, (2) simplified inventory, (3) uniform specification and (4) adequately engineered application. It is because of this that Texaco's One Sales Agreement has become so overwhelmingly popular with the management teams of multiple-plant operations.

You see, only Texaco operates out of more than 2,000 Distributing Plants strategically placed in all 48 states. This arrangement means you can get rapid delivery and lubrication engineering service that is fully coordinated, yet is geared to solve individual lubrication problems no matter where they arise in your operation.

This is practical aid to management. The kind of aid that helps bring production up and costs down. Would you like to know exactly how this One Sales Agreement operates? Call the Texaco Distributing Plant nearest you or write:

The Texas Company, *National Sales Division*, 135 East 42nd Street, New York 17, N. Y.

TEXACO 
INDUSTRIAL LUBRICANTS

BUSINESS OUTLOOK

BUSINESS WEEK

JUNE 22, 1957



Production trends aren't too heartening—and won't be till fall.

Yet **personal income and retail sales**—the heart of any economy—continue to do just about as well as anyone has a right to ask.

In other words, consumers are helping manufacturers **work down inventories**. This, if it keeps on, will soon prod production.

—•—

Retail sales aren't setting any monthly records, after you allow for normal seasonal variations. In fact, the margin of gain over a year ago may even be thinning a bit from its earlier rate of roughly 5%.

Yet the unadjusted dollar value of all **store sales in May** was \$16.9-billion, the Dept. of Commerce reports, **highest so far this year**.

And the five months' sales hit \$78.2-billion for a 4.9% gain.

Presumably the value of retail sales currently are **inflated a couple of percentage points due to higher prices**. But gains are fairly satisfactory, even allowing for that, when you consider that factory employment has been slipping gradually and overtime virtually disappearing.

—•—

People's **income from wages and salaries** has gained at an annual rate of only \$1.8-billion so far this year. The improvement since the end of 1956, in fact, has amounted to not quite 1%.

For the five months last year, the gain was \$5.6-billion or 2.8%.

The **sharpest gain in personal income** is going to people who aren't working—perhaps people in many cases who have recently stopped work.

During May, as was the case in April (BW—May25'57,p35), there was a noteworthy **rise in social security and other welfare payments** made by government. Such outlays are 17% ahead of a year ago.

One group sharing in social security for the first time to any extent are **farmers**. Their payments, along with receipts under the soil bank program, doubtless are causing many elderly farmers to call it quits.

In view of the cost-price squeeze, incentives to keep on are slim.

—•—

Widespread vacations from now through August, including some that involve industry-wide shutdowns, **will keep business lackluster**.

Demand for most raw materials, even those on which inventories have been pulled down to the danger point, will be slack.

Production has been declining very gradually so far this year, and there is little reason to expect the trend either to improve or worsen over the next couple of months.

The Federal Reserve Board's production index for May stands at 143.

There has been a **decline of a point a month** for the last three months. (The cut for March involved a revision just announced.) The drop from December's 147 peak amounts to roughly 3% so far, but we remain a couple of points higher than a year ago.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JUNE 22, 1957

Production of durable goods for the consumer market—mainly things made of metal and wood such as autos, furniture, and appliances—accounts for much of this year's decline in manufacturing activity.

Such output, down 10% from December, is little ahead of a year ago.

At the same time, metal fabricating in general has come down about 4% since the year end. Even machinery, buoyed by high-level demand for production equipment, has had a moderate dip.

—•—

Producers of nonferrous metals see no likelihood of a real upturn in demand for several weeks unless Congress comes to the rescue.

Prices of copper, lead, and zinc at midweek were the lowest in three years or more. This came about when the big copper producers finally tired of trying to hold the 32¢ a lb. quotation and cut to 29¼¢. A few minutes later, zinc was cut another ½¢ a lb.

Sharply lower prices for the red metal in London on Monday and Tuesday had foreshadowed the cut.

Demand for copper and brass products recently hasn't been too bad.

Consuming industries have been buying hand-to-mouth, to be sure. And careful pricing has been essential in closing contracts.

But even lower prices for copper and zinc aren't going to end brass mills' worries; the latest threat is a rising tide of imported products.

—•—

Pricing policy, always tricky, really gets tough in times like these. You saw it highlighted by markups in two industries this week:

- Cigarette manufacturers added about 1¢ a pack for most brands. This coincided with a favorable report on April sales—but it also came on the heels of the latest lung cancer scare.

- Sinclair Refining boosted gasoline and light burning oils a fraction of a cent to compensate for costs added by a new wage contract. But the higher prices face their test in a market beset by oversupply.

—•—

Troubles in lumber and plywood, tracing to the low level of homebuilding, cropped out anew this week.

Two plywood producers in the Northwest cut \$2 a thousand off sanded panels. Output had risen on signs of improving business. However, it now appears that production again is outrunning shipments.

And mill prices on lumber still are sagging. Crow's price index dipped more than 50¢ last week and now is down nearly \$13 in a year.

—•—

Reassurance on future paper and paperboard supply came from two sources this week, one within the industry and one from government.

- David L. Luke, Jr., president of the American Paper & Pulp Assn. and head of West Virginia Pulp & Paper Co., sees capacity outrunning needs during most of the next two years—even in newsprint. A bit of excess capacity has been apparent in paperboard for some time.

- H. B. McCoy, for the Dept. of Commerce, reports newsprint production in the U.S. rising faster than demand. While imports will continue the largest part of the supply, they soon will cease to dominate the market. In a few years, domestic output will meet about one-third of all needs.



TAPPING MOLTEN IRON FROM A BLAST FURNACE AT J&L'S ALIQUIPPA WORKS

PHOTO BY HARE

Research Looks Ahead...to Lower Costs

Perhaps the most pressing problem in the steel industry today is the search for new and less costly ways of making steel.

In J&L and throughout the steel industry, research scientists see a great opportunity in developing new machines and methods that will improve our products, raise our productivity, and cut costs.

The familiar blast furnace, where iron ore is smelted into iron, already has come under the long hard look of our technical people. Result: increased

yield through improved practice on present facilities, with even better yield in prospect. Meanwhile, the search continues for entirely new iron-making methods. These and other research projects are typical of continuing progress at J&L—a growth company in a growth industry.



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in this and other smart decorator colors

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Your office should be as attractive and comfortable as a home living room. And why not . . . when you can get Generalaire, America's most modern office desk that is turning dull-looking clerical areas into pleasant places to work.

To harmonize with wall, fixture and drapery surroundings, GF's Generalaire comes finished in many interesting color tones . . . Suede Brown, Pine Frost Green, Autumn Haze, Manila Tan and Glen Green. And all have harmonizing Velvolum or Textolite writing

tops for eye-resting qualities as well as smooth functional beauty.

As for the GF Generalaire desk itself, it incorporates too many new *exclusive* features to name here. But of this you may be sure: It has everything you'd expect in a much costlier desk . . . plus some efficient features you won't find even in far more expensive desks. This metal desk can't split or warp, its drawers will never stick, its solidly-welded joints can't come loose. Year after year, from the day you buy a GF

Generalaire, it will be as handsome as it is today. That's *real* economy!

The best way to choose from GF Generalaire's 42 models is to *see* them at your local GF Dealer or branch. For a full-color illustrated folder, write The General Fireproofing Co., Dept. B-84, Youngstown 1, Ohio.

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SEN. HARRY F. BYRD, second from right, and Treasury Secy. George Humphrey, left, square off during Democrats' . . .

Opening Attack on Tight Money

Byrd hopes to make it a historic inquiry into the nation's financial condition, but it could be a political free-for-all.

A U. S. SENATE committee this week began what was billed as a historic inquiry into the financial condition of the nation—from U. S. Treasury to crossroads bank.

But in a matter of hours, the inquiry erupted onto the floor of the Senate as an all-out political eye-gouging.

It's unlikely that the inquiry—as it is now being conducted—will turn up anything new or significant about financial conditions. But it may show whether tight money and all its ramifications will help Republicans or Democrats in next year's election.

• **Humphrey Leads Off**—The hearings by the Senate Finance Committee began Tuesday under the chairmanship of

Harry F. Byrd (D-Va.), and apparently will last until Byrd's patience is exhausted. He has promised each member of the 15-man committee unlimited time to question witnesses. Sen. Robert S. Kerr (D-Okla.) demonstrates what this can mean: He plans to question Treasury Secy. George M. Humphrey, the lead-off witness, for two days.

Humphrey is to be followed by William McC. Martin, chairman of the Federal Reserve Board, and lesser officials, many of them prime targets of Democrats on the committee. Some of the Democrats are urging Byrd also to ask "victims" of tight money to testify.

• **Top Issue**—Democrats have been leading up to the issue for weeks in a

series of speeches in the Senate, castigating high interest rates. A few days before the hearings opened, the word came from the party's top man in the Senate—Majority Leader Lyndon Johnson of Texas. "Hard money," he said, "is domestic issue number one."

Johnson described it as a "ruinous policy," harmful to business and to state and local government, profitable only to lenders. And he pinned responsibility on Humphrey, who will shortly leave the Administration after 4½ years, as the personification of fiscal orthodoxy and the strongest defender of credit stringency in time of boom.

I. Humphrey Well Armed

When the hearing opened Tuesday, Humphrey was ready with a counter-attack. Congressional committees usu-



ADVERSARIES: Sen. Robert S. Kerr (D-Okla.) asked two days for his own cross-questioning of Treasury Secy Humphrey, right.

ally get only a brief prepared statement from Humphrey—insultingly brief, some sensitive lawmakers have said. Not this time. He read a tightly written, statistics-studded 50 pages of material for two hours and a half.

Humphrey showed from the beginning that he came loaded with political ammunition of his own. First, he pointed out that there was no microphone and people in the back of the room might have trouble hearing. After reading a few pages, he accepted the invitation of Republicans on the committee to move up to the raised horseshoe bench occupied by members, where he could face the audience.

His statement wrapped up the hard arguments in favor of tight credit as a curb on booms. He defended his own policies as Treasury Secretary, and those of Martin and the Federal Reserve. He described an economy that is still rolling along at full throttle, and boasted of how this prosperity had helped the common man. In four years, he said, the earnings of labor, even after adjustments for price increases, have gone up \$10 a week.

• **People's Choice**—Humphrey identified inflation as the greatest threat to continued prosperity—and he challenged his critics to carry their case to the voters.

"Faced with this choice between the inconvenience of limited credit and the robbery of renewed inflation, our people would certainly choose the course which we have pursued for the past four years," he summed up.

II. Political Outbreak

Humphrey's statement was all the committee could take the first day; it adjourned without a question being asked. But, the same afternoon, Republicans in the Senate used it as the basis for an attack on the hearings. Sen. Prescott Bush, (R-Conn.) said the Finance Committee has neither the time nor the money to do a thorough job, and that its approach is too political, "too wrapped up in an attack on the Administration." He was joined by Sen. Homer E. Capehart (R-Ind.).

Democrats rushed to the defense of Byrd and the hearings, with such opposites as conservative Spessard L. Holland (D-Fla.) and liberal Hubert Humphrey (D-Minn.) joining forces. This is typical of reaction of Democrats on the money issue—which is one reason that Johnson and other party leaders like it as a major campaign rallying-point next year.

• **Ambitious Plan**—Before the hearings opened, Byrd had hoped to avoid this

kind of political wrangling. He told television audiences that the investigation would be the most comprehensive look at the country's financial condition in half a century—since the study conducted by Sen. Nelson Aldrich, beginning in 1908, that led eventually to establishment of the Federal Reserve System.

Byrd still believes the findings will bear comparison with the Aldrich study. But he is suffering from a major handicap. He has been unable to find a chief counsel of sufficient stature to take hold of the hearings and give them real direction.

Samuel D. McIlwain—from the law firm of former Truman counsel Clark Clifford—has been appointed counsel for the investigation, but Byrd carefully withheld the title of chief counsel. The position is still open and will be filled if Byrd can find the right man.

• **Free-For-All**—Lacking strong staff direction, each senator is free to develop his own line of inquiry or attack. And on the Democratic side, at least, there's going to be a wide variety of special positions developed.

By way of defense, the Republicans will have no difficulty elaborating and illustrating their tight-money position, using the Humphrey statement as a guide. There's no doubt that Hum-

phrey's statement represents the strongest, tightest, most-reasoned defense that the Administration's top economic brains could produce, in order to convince the public that their policies have been right.

By midweek, as the questions began to come, it was plain that Humphrey had anticipated most of the Democratic criticisms. Democrats have been telegraphing their punches in Senate speeches and in questions already asked at other hearings. Most of Humphrey's 50 pages consisted of counter-punches.

All this lays down the general direction the hearings will take, as senators take their turn in the questioning.

III. Reply to Byrd

Though a warm admirer of Humphrey, Byrd disagrees on the look of the economy. He finds "serious conditions," with "exceedingly dangerous potentialities," in current fiscal and monetary policies. Byrd has three specific interests: (1) what he describes as the renewed threat of inflation; (2) the rise of government spending, and (3) the burden that the rise in interest costs puts on the federal budget. Humphrey was prepared on all three points.

On inflation, Humphrey cited cost-of-living rises: an average of 0.6% a year under Eisenhower, in contrast to an average increase of 7% a year for the previous 13 years under Democrats. It was at this point that Humphrey conceded a faster rise in recent months and labeled inflation as "perhaps our most serious domestic economic problem."

On spending, an issue where Humphrey and Byrd aren't actually far apart, Humphrey did not fare so well in the actual questioning. He had a prepared defense, comparing the federal budget with gross national product. In 1953, when the Administration took office, the budget was 21% of GNP; now it is only 16%—partly because spending is less, partly because the economy has grown.

Byrd accused Humphrey of having changed Treasury Dept. bookkeeping to make it appear as though the Administration had reduced the public debt, whereas Byrd argued it had really increased from \$266.7-billion in January, 1953, to \$274.2-billion currently. Humphrey pointed out that the debt had been reduced some \$1.6-billion the past couple of years, but he accepted Byrd's main point.

Displaying considerable testiness, Byrd harassed Humphrey on the Administration's recent rise in spending and got Humphrey—finally—to agree that this rise is, on the whole, inflationary, even though there is a budget surplus.

On the added costs of carrying the

public debt, Humphrey was dealing with the subject that helped lure Byrd into the whole investigation. In a preliminary statement, Byrd pointed out that interest on the debt is taking 10¢ out of every federal tax dollar, and that if the entire debt were refinanced at recent rates, the cost would rise from the present \$7.2-billion to \$10-billion.

Humphrey showed that, since the Administration took office, the per capita interest charge on the debt has risen from \$37 to \$42. This \$5 per person, he insisted, is a bargain. "I would be disappointed to see [interest rates] go any higher," he told the committee, "but if that is the price we must pay to prevent the growth of excessive credit and consequent inflation, it will well justify the price."

Humphrey denied that the Treasury is in any particular trouble with its own financing—even though, the day before he testified, Treasury bonds had sunk to new lows (page 26).

IV. Hot Issues

The issues with highest appeal to politicians will be developed by a group of Democrats on the committee headed by Kerr, Albert Gore (Tenn.), and Russell B. Long (La.). These men—plus Hubert Humphrey (Minn.), who has taken a leading part in Senate debates—are an unofficial board of strategy for the Democrats against tight money.

• **Heavy Spending**—Kerr talks about "the evil triumvirate of high interest, hard money, and tight credit." As a group, the senators deplore the effects of credit stringency on housing, public works, and small business loans. Secy. Humphrey gave the Republicans' answer:

• In the past four years, \$57.5-billion has been spent for housing—as much as in the preceding six years.

• \$16.7-billion has been spent for new highways—more than in the preceding 11 years.

• \$8.8-billion has been spent for school construction—more than in the preceding 20 years. And during the most recent nine months for which comparisons are available, more school bonds have been sold than in any previous nine-month period.

Even in regard to small business, Humphrey had a reassuring word: Credit granted by the 10,853 banks of the country that, in general, cannot make loans of more than \$100,000, has increased 19% during the Eisenhower Administration.

• **Housing**—Gore makes a specialty of tight money's impact on housing. He likes to show that on a \$10,000 20-year mortgage, the cost of interest has gone from \$7,000 to \$10,000. Secy. Humphrey concedes that interest costs have gone up, but only by a small fraction

of the increase in other costs such as land, materials, and labor.

Humphrey blames the current slump in housing on these general cost increases and a slowdown of new-family formation, rather than on tight money.

• **Inflation Theories**—Gore and Long take a consistent position that increases in interest rates are themselves inflationary—exactly opposite, of course, from the views of orthodox monetary theorists, who argue that rising interest discourages marginal demand for money and therefore lessens inflationary pressures.

"There is nothing more inflationary than high interest rates," Gore contends.

Secy. Humphrey was prepared with a detailed rundown of the role of interest in costs. "Of the cost of a [manufactured] article selling for \$100, about 33¢ represents interest, with no more than 10¢ of that representing an increase since 1952," he told the committee. He said that consumers are now paying \$127.50 for goods that 10 years ago would have cost \$100—and that out of this \$27.50 rise, increased interest is responsible for only 20¢.

• **Who Profits?**—Sen. Humphrey and Johnson repeatedly charge that tight money operates for the sole benefit of lenders. "An economic system in which lending is the only profitable activity cannot long survive," Johnson told the Senate the same day the Byrd hearings opened.

At almost the same moment, Secy. Humphrey was telling the committee that the earnings of insured commercial banks, as a return on average capital accounts, were 7.82% last year—lower than the average for the prior three years, and for the years 1948-52 under Democratic Administrations.

• **Douglas' Role**—In all this, Sen. Paul Douglas (D-Ill.), plays a role all his own. He is a junior member of the committee, but his standing as a former professional economist and his fiscal-monetary study of 1953 as chairman of the Joint Economic Committee of Congress, set him apart.

Secy. Humphrey, indeed, took pains in his statement to nominate Douglas as a patron saint of tight credit to restrain a boom. Humphrey quoted twice from Douglas' 1953 study, with approval. During one of these passages, Douglas' neighbor at the committee table—Sen. Clinton Anderson (D-N.M.)—made the sign of a halo over the Illinoisan's head.

Douglas' questioning, when he gets his turn, will probably sustain the principle of using tight money as a restraining influence, but will be critical of the way the principle has been applied. On the whole, he'll probably have a restraining effect on the Kerr-Gore-Long group.

Money Gets New Arm-Twisting

● Squeeze approaches climax, as all sectors of money market are caught by new rise in borrowing costs.

● Monetary managers hold to restrictive credit policies, hope latest rate adjustments will stabilize market.

● But most market authorities see worst still to come, and many Wall Street men fear a blowoff ahead.

The squeeze on money approached a climax this week as the cost of borrowing jumped perpendicularly all along the line.

All sectors of the money market felt the pinch. And though there was a general expectation that this week's squeeze would temporarily ease somewhat for technical reasons, market authorities were almost unanimous in predicting that the worst was yet to come.

This is because the nation's monetary managers in Washington are intent on maintaining their restrictive credit policy. In a statement before Congress (page 23), Federal Reserve Board Chairman William McC. Martin made clear this week that economic conditions do not call for "relaxation in efforts to curb inflationary pressures."

Martin's statement was consistent with current Fed policy. Last week, for example, the nation's banks were forced into debt with the Fed to the tune of \$570-million, up \$124-million from the previous week. But the Fed made no attempt to ease pressure, although clearly the banks were being faced with an upsurge of demand from corporations borrowing to pay taxes.

These indications of the Fed's aggressive attitude—coming at a time of heavy tax borrowing—convinced the market that though conditions might show some slight improvement once the tax date passed, the squeeze itself would get worse.

In fact, the market was not only concerned about the high cost of money, but even its availability.

• **Everybody Caught**—There was no doubt this week about the trend to higher rates. Borrowers of all kinds, public and private, short-term and long-term, were caught by the squeeze:

• The U.S. Treasury paid 3.4% on its weekly issue of 91-day bills, the highest yield since the bank holiday of 1933.

• The major finance companies upped their rates on borrowings for the second time in less than a week—to 3½% for 5-to-29 day paper, 4% for six-month money. Commercial paper dealers also raised their rates, with the

result that big corporate borrowers will have to pay 3½% for four-to-six month money, while smaller firms will pay 4½%.

• In the long-term market, Southern Bell Telephone & Telegraph Co., a top-rated utility that sold a \$60-million issue at 3.9% last October, this week borrowed \$70-million at 4.9%, the highest it has had to pay since 1929. Moreover, it had to sweeten its offering by agreeing not to refund any of the issue for five years.

Companies that did not command best terms paid even higher costs and had to swallow stiffer terms. For example, Michigan Consolidated Gas Co. this week paid 6.1% on an offering of \$30-million first mortgage bonds. In November, 1955, it had paid slightly less than 3.4%.

• **Pulling Back**—Faced with these conditions, some companies changed their plans for borrowing. Last week, New York Central RR decided against paying the rates demanded by underwriters for a public offering, and sought to make a private placement. This week, Public Service Electric & Gas Co. postponed an offering of \$25-million in preferred stock because of "unsettled conditions," and Associates Investment Co. drew back a \$20-million debenture issue due to "the disorganized condition of the market." Kerr-McGee Oil Industries, Inc., delayed a public offering while it sweetened the terms.

• **Stabilization Hope**—According to some market experts, the new high level of rates represents an attempt to achieve a supply-demand equilibrium in the interest rate structure. As one underwriter put it, "We've now reached a point where rates are realistic enough to tempt investors."

The U.S. government securities market is also undergoing a full-scale adjustment. Normally, interest rates on governments are about ¼ of 1% below the top corporate issues. But as the yields on corporates rose this spring, the margin widened. However, in the past two weeks, prices of governments have declined sharply, in many cases reaching record lows. For example, the famous "Humphrey-Dumpty" 3½%

bonds selling below 94 now yield almost 3½%.

The Federal Reserve hopes that the broad adjustment in rates carried through this week will stabilize the market. But Fed officials admit that they are not sure. The fact is that the Treasury will be in the market, both for new cash and refinancing, fairly constantly this summer. If corporate demand remains strong, then interest rates will probably surge higher.

Certainly the money managers feel that as long as the demand for funds by both government and business continues, they must maintain a tight rein on the money supply. As they see it, any relaxation in their credit policy would serve to provide new stimulus to the wage-price spiral. The Fed considers that higher rates are inevitable at this stage in the capital boom.

• **Discount Rate Debate**—Actually there is now a strong minority in the board and at the regional banks who want another hike in the discount rate, which has been at 3% since August. They argue that it would merely confirm the over-all rise in interest rates. From this point of view, a hike in the discount rate would not be an indication of increased tightness, but merely be a recognition of the current state of the market.

This viewpoint, which has adherents in many of the regional Fed banks as well as in the board itself, does not claim a majority. Those officials who are resisting a new move claim that though the interest rate structure has made an upward adjustment, a rise in the discount rate would insure a further climb. In particular, they say, it would automatically lead to a hike in the prime rate that commercial banks charge their top accounts.

It is rumored that at least two Fed banks have had their applications for an increase in the discount rate turned down by the seven-man board of governors, which has the authority to approve or reject all moves on the discount rate. The New York Fed, which is in the heart of the money market, is resisting any overt move most strongly. According to one of its top officials, any new sign of tightness might bring on a crisis in the money market.

The Fed will probably hold off any move until the Treasury gets through the financing operation it has coming up within two weeks. But the market has no assurance that the majority now against a move will still exist later in the summer.

• **Blowoff Ahead?**—Many Wall Street men feel that whether or not the Fed moves, the money market is headed

for a climactic blowoff. As they see it, the Treasury will be forced to pay a great deal more than current rates for the cash it needs, and this will not only mean higher rates all around but will cut down on the amount available to the rest of the market. The result could make the squeeze so tight that it would precipitate the kind of crisis that existed in early June, 1953, when borrowers were unable to get

funds at any price. If that happened, the Fed certainly would have to relax its tight money policy—and might be forced to swing toward easier money.

The Fed says it would like to avoid any severe trouble in the market. But observers point out that the market is already undergoing a lot of stress and strain. "It will only take a little more pressure," says one underwriter, "to bring on real troubles."

Heat Plays Hob With Utilities

Breakdowns and unexpectedly high summer demand catch New York and Chicago with reserves unready.

"Emergency!" cried two of the nation's largest electric utility companies early this week. They sent out appeals to their customers: "Turn off all the lights and air conditioners that you don't really need—please."

Heat waves over the eastern half of the nation, a few minor breakdowns, and the changing pattern of national power demand, had caught up with the two utilities—Consolidated Edison Co. of N. Y. and Chicago's Commonwealth Edison Co.

- **Change from South**—Over the last decade, with a spreading northward movement, the nation's utilities have had to change their operating rule books to cope with peak demands for power that come now in the summer, breaking the old tradition of winter peak loads.

The change began right after World War II in Houston, Tex. This week, New York, at least, expected it. For the last two years, Con Edison's winter power loads, climbing themselves, have consistently been topped by the following summer's. Last Monday, though, after three solid days of high temperatures, the heat cycle caught up with Con Edison.

It thought it would have enough of its 3,696,000 kw. capacity available.

Some standby generators were idle, and others, normally running, were down for repairs. Available capacity was between 200,000 kw. and 300,000 kw. less than the 3.69-million kw. maximum.

Then demand started to soar. A large part of it came from air conditioners, installed in thousands over the last few years.

Simultaneously, breakdowns began in the power stations, and, in a few cases, in cables and transformers.

The prime cause of trouble all around was heat. In the power stations, heat helped cause the breakdown of boiler and generator parts. By 10 a.m., these breakdowns cut Con

Edison's capacity by some 550,000 kw.

The appeals went out, some to interconnected systems, others to customers.

Within an hour, other systems were helping out. Niagara Mohawk Power Corp. sent Con Edison 100,000 kw., stepped it up to 200,000 kw. later. Long Island Lighting Co. put in almost 100,000 kw. These amounts still couldn't help Con Edison meet the demand. Con Edison itself was struggling to put its standby generators to work and repair the breakdowns. In the hour between 3 p.m. and 4 p.m. it met its peak load for the day—3,236,000 kw.

- **Same Story**—In Chicago, Commonwealth Edison's troubles were similar. Generating equipment of 400,000 kw. was shut down for repairs at the start of the day. By mid-morning, breakdowns again caused by heat reduced capacity even more. Rapidly, service had to be cut to some areas, and voltage reduced to others.

Later, with power borrowed from other utilities, it met a load of 3.7-million kw.—still not above last winter's peak of 3.74-million kw.

Utilities know that their only sure way around the danger of the blackouts and dim-outs that afflicted New York and Chicago this week is to have:

- Batteries of extra generators ready to take over if one or more of its power plants is unable to produce. Extra capacity is usually left lying idle, sometimes it takes a full day to get it running at full output.

- Finely scheduled maintenance programs. A decade ago, utilities could handle this in the quiet summer periods; now they have only a few weeks in spring and fall when they can safely dismantle and repair large parts of their systems.

To guess right, utilities must obtain and interpret correctly long-range weather forecasts, must also keep a close check on sales and installations of electric appliances in their territories. Sometimes they may still guess wrong.

Fall-Out Problem

Radioactivity in water and air poses operational problems for the photographic industry—but it is licking them.

Knowlton Bros., an upstate New York manufacturer of photographic papers, has just resumed production after a 45-day shutdown. The lapse in operations was caused by a slight radioactive contamination of the company's water supply. The degree of contamination was much too slight to be considered a health hazard. But even a slight degree of contamination is too much if you make photographic supplies. And the fall-out problem created by the testing of atomic weapons is one which the whole photographic industry is having to cope with.

- **Adjusting Schedules**—Knowlton has to schedule its production of special papers that it supplies to several major photographic products manufacturers by the level of radioactive contamination in the water and air. A microscopic radioactive dust particle on paper that is used for wrapping or packing film can seriously fog or spot sensitive film. So the Watertown company makes photographic paper as fast as it can when fall-out is low or absent. When fall-out is high, production is shifted to other types of paper products. The 45-day halt in photographic paper-making was the most prolonged shutdown the company has had.

Another upstate New York paper mill, J. P. Lewis Co. of Beaver Falls, operates much the same way. The longest period during which it has had to curtail production of sensitive products has been 12 days. "Fall-out is a problem," says Pres. J. P. Lewis, "that we have learned to live with. We build up inventory when conditions are favorable, then shift to other products when our water and air show any signs of fall-out. It's like the construction industry where building goes fast in good weather and slows down when it storms."

- **Fall-Out Information**—Knowlton and Lewis and other photographic supply companies throughout the country get a big assist from the National Assn. of Photographic Manufacturers, Inc., in licking the fall-out problem. NAPM maintains liaison with the Atomic Energy Commission and is warned of impending weapons tests. Large companies in the field, such as Ansco and Eastman Kodak, also keep small suppliers in their areas informed on local fall-out conditions.

There are several reasons why the

industry has kept quiet about the fall-out problem. For one thing, it doesn't want to draw public attention for fear of an increase in complaints or local panic. For another, there apparently is widespread confusion concerning the security classification of any information on fall-out.

The AEC supplies the NAPM with advance warning of all weapons testing by the U. S. and any other country it knows about. The NAPM sends out confidential letters to its members, who advise suppliers in their area.

• **Security Confusion**—As far as AEC is concerned, all information passed out except Pacific test dates is unclassified. But NAPM, in order to simplify its job of getting information to the industry and to keep on the safe side, has tended to stamp all fall-out information as confidential.

Actually, NAPM's system of disseminating information of radioactivity dates back some 20 years. In the 1930s radium paint in scrap paper used as a raw material resulted in fogged film. But the problem of radioactivity assumed serious proportions in 1945 when the first atomic bomb was exploded. NAPM and the government then set up the present comprehensive system for exchanging information.

• **Industry Precautions**—Now, all manufacturers, including Eastman Kodak, Ansco, and du Pont, keep a close check on raw materials and local conditions and report no spoilage.

Eastman Kodak maintains 15 monitoring stations, supervised by Dr. E. K. Carver, who also is chairman of the NAPM committee on fall-out pollution. Carver is not worried about future increases in the fall-out level. He says that quality control of materials for sensitized products is so rigid that the additional precautions taken because of fall-out are not too significant. In case of massive fall-out, a standby procedure has been developed to clean up the area by scrubbing roofs and entries, but it never has had to be used. "Fortunately," says Carver, "all the radioactive particles we have seen so far can be filtered out of air and water where necessary."

Du Pont has had the same experience. "The problem," says Roscoe G. Robinson, plant manager of the company's Defender Div., "is like handling a new plant blight—you develop an agent to combat it and go on growing your tomatoes."

• **Special Problem**—The problem is a little different for the photographic papermakers. They need huge amounts of water—100 tons of it to make a ton of paper—and putting in expensive filters or changing to underground water sources is not always possible. So, unless the situation grows worse, they'll continue to produce on the basis of favorable fall-out reports.

Where Congress

CONGRESS has its second wind and is getting ready to close out its affairs for the year. And the one thing that can be said about this year is this: The members of the House and Senate found no overriding issue that needed legislation (chart right). Indeed, the dominant political and economic problem turned out to be whether the high cost of government could be cut.

• **Stalemate**—Pres. Eisenhower, returned to office by one of the biggest votes of confidence in history, put before Congress in his State of the Union message an ambitious legislative program designed to effect his own "Modern Republicanism." But a Democratic-controlled Congress, with little urging from the President until recent days, has declined to do anything about it.

No major new piece of legislation has been passed this session. Many of the President's proposals will go over to next year (table). Little if any progress has been made on proposals for school construction aid, for a broadened minimum wage law, for federal authority over civil rights, even for statehood for Alaska and Hawaii. Instead, Congress and the President have been occupied with the economy debate—the President seeking to justify his \$71.8-billion budget, with minor concessions, and Congress trying to slash it, with minor success.

• **No Keen Interest**—The record of Congress this year is already being explained by contemporary historians on this ground: Relative peace and substantial prosperity make lawmaking a pretty unimportant activity. A vast majority of the citizenry, most congressmen feel, do not want or need new laws passed. You can recall a similar climate in 1947-49, when the country was enjoying both prosperity and an uneasy absence of shooting war.

At that time, Pres. Truman was frustrated when a Republican-controlled Congress refused to respond quickly and affirmatively to his ambitious legislative program. He talked about a "do nothing" Congress, and, after his renomination for President, he called the famous "Turnip Day" special session in order to get something done on price inflation and welfare. The special session, still reflecting the ho-hum mood of the voters, didn't do anything either.

• **Dull Performance**—The table gives tabular proof of the mood of this Congress. Except for the mandatory passing of appropriations bills, this Congress has done little. Before the session is over, probably sometime near mid-July, Eisenhower will have gotten

a foreign aid act. But there is little chance that much more of his January program will be adopted this session.

• **Economy Fever**—This year's distinguishing feature of economy was almost a chance development. There always is latent demand for economy from those who pay big taxes. This year, the indecision of Eisenhower in backing his budget, coupled with the dissents of key Cabinet members such as Treasury Secy. George Humphrey, fanned the economy sparks to life.

The economy fever first took hold of the House Appropriations Committee, which set its sights on lopping \$4-billion to \$5-billion from the regular money bills. The mood spread to the Senate, which in the past has often restored much of the reduction made by the House. Senate Democratic Leader Lyndon Johnson, hungry for a good issue, saw a chance to make the Democrats the party of economy and to pin a spendthrift label on the Eisenhower Administration.

Chief victims of the economy drive are the new programs that call for new authorizations by Congress for future spending. The conservatives of both parties teamed up to threaten any new public works, reclamation projects, school construction, and even military construction. The biggest White House casualty is the program calling for \$1.5-billion over the next five years to help the states build schools.

The school construction bill is snagged in the House, and prospects for passage are dim. Last year, the segregation issue was enough to bring a thumbs-down vote. This year, the economy issue has been added.

• **Politicking**—There is politics, always to be remembered. Democratic leaders are relying on investigations, rather than legislation, to produce election issues. Early in the session, Speaker Sam Rayburn and Senate leader Johnson agreed that their best issue was "tight money" (page 26).

So Rayburn sidetracked the Administration's proposed monetary study and instead pushed for an investigation to be made by the House. Sen. Johnson picked up the ball in the Senate, tossed it to the Finance Committee, where Sen. Harry F. Byrd could join with New Dealers such as Sen. Robert Kerr of Oklahoma and Sen. Paul Douglas of Illinois in taking a skeptical view of Administration monetary policies toward the farmer and small businessman. Johnson is gambling that these men will be able to dramatize the fiscal policies of the Administration so as to produce pay-dirt issues for next year's elections.

Stands, With Recess Near

THE MEASURE	HOW IT STANDS	LIKELY OUTCOME	
		This Year	Next Year
Extending the Housing Act to provide lower down-payments and more money for Fannie Mae.	Both branches have passed substantially similar bills.	Conferees will compromise differences.	
Alaska statehood.	Reported favorably in House; no Senate action to date.	Despite Administration support, Southern opposition reduces chances.	50-50 chance.
Aid for school construction.	Reported favorably in House.	Despite Administration support, segregation issue and economy drive will block it even in House.	No action.
Increase in first- and second-class postal rates.	Reported out in House; moving slowly in Senate committee.	Good chance in House; Senate outcome doubtful.	Favorable Senate action likely.
Easing controls on natural gas producers.	Democratic sponsors and White House now jointly pushing bill in House.	Fair chance in House; no Senate action.	Odds against favorable Senate action.
Tightening requirements for registration of lobbyists.	Senate committee holding hearings.	May be reported—but not passed—in Senate.	No action.
Requiring prior notification of corporate merger plans.	House ready to take up bill.	House almost sure to pass bill; Senate won't act.	Good chance of Senate approval.
Extending minimum wage law to retail and wholesale workers.	Senate hearings ended; House hearings continuing until fall.	Good chance in Senate; House won't act.	Fair chance.
Requiring labor unions to disclose pension fund data.	Committees split on what types of plans to include.	Almost sure to pass in Senate once committees agree.	Good chance in House.
Guaranteeing voting rights of minorities.	House has passed Administration bill.	Senate chances hinge on move to invoke cloture, Southerners' ability to filibuster.	Bill might pass in 1958 if it bogs down this year.
New reclamation projects.	Action slowed by "no new starts" policy among conservatives.	Niagara power project may pass; little hope for others.	Niagara prospects good.
Adding 7,000 miles to federal highway system.	Bill linked to ban on billboards along federal highways.	Chances fading.	Fair chance.
Eliminating tax loopholes.	House committee disagreed on language.	Chances dimming.	May pass House; Senate in doubt.
Atomic energy measures, including ratification of international agency, liability insurance for private plants, construction of federal power plants, more public regulation of AEC.	Treaty approved by Senate this week; other measures still in committee.	Politics may block the rest.	Chances better.
Extending temporary ceiling on federal debt.	If July 15 tax collections are good, permission to continue \$3-billion increase in ceiling may not be needed.	If no increase requested, ceiling automatically drops to \$275-billion; if new ceiling is asked, Democrats will make political hay, then pass the law.	

Golf's New Promoter Makes Big Golf Pay

WITH ONE DULL PLUNK, 34-year-old Dick Mayer, pro golfer from Florida, sank a 24-ft. putt on the 18th green of Toledo's swank Inverness Club last Sunday afternoon. In that moment Mayer earned his \$7,200 purse as winner of the 1957 National Open Golf Tournament, also put himself in line for future earnings of some \$100,000 from advertising endorsements and touring appearances.

But back at the clubhouse a burly amateur who rarely manages to break 90 on the rounds he plays these days, was adding up revenues that go far higher than the money Mayer may make.

The amateur is J. Edwin Carter, impresario of big-time golf, who in four years of tournament promotion has brought profits to this long penurious business.

• **Weird World**—For years professional golf has been a curious world inhabited by autocratic officials, temperamental players, and sensitive promoters whose bickerings and tantrums burst out at every major tournament. The different groups still generate plenty of noise, but the volume has been sharply re-

duced. One reason lies in the profitable union of golf and business at which Edwin Carter officiates.

This year's National Open was the third of which Carter has been business manager. In each of the last three years, the take at these tournaments, from sales of tickets and advertising space in the printed program, has been about double what it was before 1953.

For its sponsors, the U.S. Golf Assn., for its hosts, the Inverness Club, and for Carter, this year's National Open grossed around \$350,000.

• **Sporting Business**—"There is," says Carter, "a close affinity between big golf and big business. I've just pulled together a workable package of research and merchandising."

For last week's National Open, Carter had been busy for two years getting that package together. In 1955, the Inverness Club had bid for the tournament, and won, and it sought him then for manager.

• **First Step**—Carter's first step was to write a 30-page presentation to the club on what arrangements it should make—from the number of players and spectators it should expect to the num-



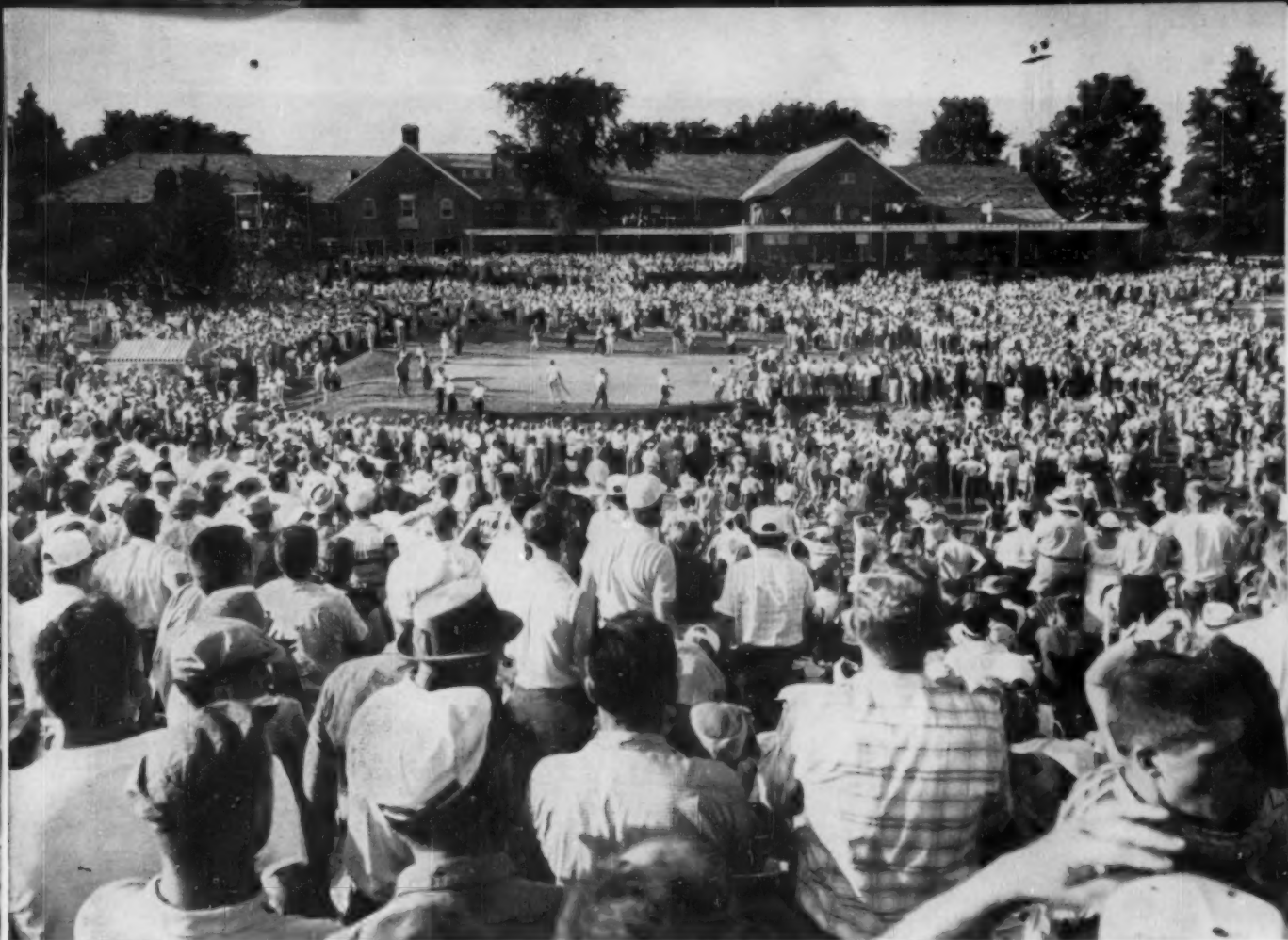
PROMOTER J. Edwin Carter, bringing business to the fairways, got crowds he sought at National Open Golf Tournament.



COMMUNICATIONS network, manned by walkie-talkie operators, keeps Carter in touch with whole tournament's progress.

TRANSPORT runs smoothly despite the crowds and the 14,000 cars filling club's parking lot. Club collected parking fees.





FIELDS for businessman Carter's management are the broad fairways, velvety greens of Inverness Club, at Toledo, Ohio.



PUBLICITY gets Carter's attention as he directs one of his press staff to help with questions from sports writers.



PLAYERS, like Jimmy Demaret (above), make the event, need Carter's attention, too.

ber of hot dogs that might be consumed.

Last September, Carter set himself up in an office in the Toledo Chamber of Commerce building. Meantime, the Inverness Club had set up its own organization headed by its most influential members.

The tournament project really got moving late last year when Carter and the club committeemen began pushing advance ticket sales. One technique was the promotion of a Christmas sale of tickets good for all four days of the tournament. They went at \$12 each, and by last Dec. 25, \$65,000 was in the till from these sales. By the time the tournament opened more than \$100,000 worth were sold.

• **Money-Maker**—Next step, starting early this year, was solicitation of advertising for the 240-page printed program, which sells for \$1 a copy and this year had a press run of about 20,000.

This printed program is one of Carter's biggest money-making ideas. It was his discovery that salesmanship could make advertising space in the program valuable that led him into the golf tournament business. That discovery came in 1954 when, as a member of the Baltusrol Country Club, in New Jersey, he helped arrange for the National Open to be held there that year. The program for 1953's National Open had grossed \$17,000. Carter plugged the idea that a "quality" audience would read the program. Months of work produced a fat advertising take. And when the accounts were in, Carter found the program had grossed \$107,000 in 1954. Each year since, he has followed the same procedure. This year's gross on the program, of which he is, in effect, publisher, will be about \$108,000.

• **Cutting the Cake**—Estimates are that apart from the program's profits, the sponsors will gross \$44,400 from concession rentals and \$184,000 from gate receipts.

The Inverness Club takes all the concession rentals and 85% of the program's profits. Carter gets 15% of the gross of the program space sales, 5% of the gross of advance ticket sales, plus a fee of "a few thousand" paid by the club. The U. S. Golf Assn., sponsor of the event, and the club split 60-40 the remaining income from ticket sales.

The club stands to make between \$50,000 and \$100,000 from the four-day tournament. Carter guesses he'll get \$20,000.

• **In Demand**—Only a decade ago, tournament sponsors were lucky to make more than a few thousand out of events like these. Now they're all calling for Carter's advice—and his system of research and marketing.

Last year, the Professional Golfer's

Assn. appointed him its tournament manager—on a fee of \$21,000 a year—and he'll organize more than 60 of its tournaments this year. He is also retained to manage non-PGA events.

Carter, who has at various times been an auto and appliance dealer, a department store executive, seed merchant, salesman, advertising man, and owner of

a chain of small-town newspapers, expects he'll make "well over \$50,000" in his new line of business this year.

Already he's on his way to the next major event in golf: the Women's Open Tournament. And two more distant dates are noted in his diary: the 1958 and 1959 National Opens at Tulsa, Okla., and at Mamaroneck, N. Y.

New Drug Hints Cancer Hope

Squibb's compound is still in early testing stage, but its success in checking breast cancer in animals and its current wide testing in cancer hospitals show high promise.

In the wake of last week's electrifying rumor that E. R. Squibb & Sons is testing a new compound that may prove to be the first long-sought cancer drug, trickles of information concerning the compound's significance and its place in the fight against the disease have started to seep in.

Chemically, the compound is a steroid which the company calls Broxoron; it is related to the female sex hormone group of compounds.

Both Merck & Co. and the Upjohn Co. are reported to have an identical steroid under test—but Squibb appears to be further along in the actual testing. Squibb has run extensive experiments on animals at its Institute for Medical Research at New Brunswick, N. J., and since May 15 the drug has been out under study on human patients at a number of cancer research centers.

• **What It Does**—Initial results—particularly in the animal tests—indicate that Broxoron is unusually successful in treating metastatic cancer of the breast (that is, cancer transferred from its primary focus through the blood vessels or lymph channels). What it appears to do in these cases is to strengthen the immunity of the blood and its ability to fight off the intruder.

• **Cautious Jubilation**—What puts a damper on official proclamations about Broxoron now is the fact that little of real substance is known about how steroids behave biochemically. The compound, according to a Squibb spokesman, "is still in its infancy, clinically," and can't be intelligently evaluated without many additional studies.

Yet those closest to the work are jubilant. Squibb chemists and biochemists who have been working in steroid research for a number of years believe honestly that Broxoron may be the first drug of real merit in chemical treatment of cancer. The number of hospitals and medical centers that have received shipments of Broxoron for study indicates how strong is their hope.

Officially, only the Jackson Memorial Hospital in Miami, the University of

Miami Medical School, and New York's Sloan-Kettering Institute for Cancer Research are listed. Actually, more than a score of other centers are running tests.

• **Search**—Cancer researchers have long sought a compound that will injure (or slow the growth of) cancer cells as penicillin injures the bacterial cells that cause lobar pneumonia. A number of chemicals have been turned up that briefly restrain certain types of cancer—but none as effective as the anti-bacterials. That led medical researchers to conclude that there must be some factor effective against bacteria but less effective against cancer—and this factor, they generally agree, is immunity, the body's power to fight off an invader.

The natural immunity mechanism operates principally by means of circulating antibodies. These are a powerful ally of such agents as penicillin.

In the case of cancer, there is very little immunity due to such antibodies—but there is good evidence that some spontaneous immunity can exist in humans. This involves another mechanism of immunity—the ability of a type of white blood cells called lymphocytes to combat invading cells. Under the microscope, scientists have observed lymphocytes mobilizing around a cancer to form a barrier.

• **Broxoron's Place**—Only preliminary research progress has been made along the lines of this reasoning. But Squibb's new steroid (and its apparent success in fighting off the growth of breast cancer in test animals) fits in neatly.

The steroid hormones (secreted in humans by the adrenal gland) have long been known as an important cog in the immunity process. Scientists have good evidence that in certain forms they restrain the growth of certain types of cancer. Scientists have hoped to strengthen this immunity by artificially administering synthetic compounds capable of stepping up and supplementing the adrenal hormone activity. This, in the case of breast cancer and according to early tests, Broxoron appears to do.



Protected by a laminated radiation-resistant glass window 5 feet thick, a Sinclair scientist manipulates the controls which handle the radioactive material.

Sinclair Opens "Hottest" Research Lab

Sinclair has begun pioneering a new petroleum research frontier. In a recently opened laboratory at Harvey, Ill. the most powerful source of gamma radiation ever used in industrial research has been put to work in the study of petroleum processes and products.

To date there have been three basic tools for processing crude oil—heat, pressure and catalysts. Now there is a fourth—nuclear radiation. In this "hottest" of all U.S. industrial research labs, Sinclair Research Laboratories, Inc., subsidiary of Sinclair Oil Corporation, will seek ways to use this new tool most effectively and economically.

Further, it will try with powerful radioactive

tracers to resolve heretofore unanswered questions about the basic nature of petroleum products.

New knowledge is essential to industrial progress, and Sinclair once again is showing the way in petroleum's continuing quest into the unknown.

SINCLAIR

A Great Name in Oil



TV INTERVIEW granted by Khrushchev (left) to CBS newsmen is considered by Washington officials and U. S. observers as an indication of . . .

New Red Propaganda Tactics

Washington believes the Khrushchev interview signaled a new offensive by Russia to soften up public opinion. It may complicate any real cultural exchange

Three weeks ago Nikita Khrushchev, top Soviet leader, faced TV cameras during an extraordinary one-hour interview on CBS's program, *Face the Nation* (picture). It was the first time that Soviet propaganda got inside the living room of the average American.

Now, Washington officials and non-official U.S. experts on the Soviet Union seem agreed that the Soviet propaganda machine is shifting gears for a wholly new battle of words between East and West.

• **The Goal**—If they are right, then the Khrushchev interview was just the first salvo in a new propaganda offensive designed to:

- Lead the U.S. toward another Geneva-type summit conference.

- Make up ground that was lost in suppressing the revolt in Hungary.

- Divert the attention of the Russian people from economic difficulties at home.

- Build up Khrushchev's personal prestige not only throughout the world, but within the Kremlin.

Signs of such a propaganda shift already are discernible. Khrushchev said last week—during his visit in Finland—that his TV appearance was "excellent preparation" for direct negotiations with the U.S. Last weekend, a "Leningrad housewife" sent a propaganda-

filled letter to the N. Y. Times. A leading U.S. magazine soon will carry a long article by one of the Soviet's top economists.

• **Cultural Exchange**—And, right now, Soviet Ambassador Zaroubin is pushing a new "cultural exchange" package on the State Dept. It is a new version of earlier Soviet proposals—ballet troupes and opera soloists in exchange for visits of U.S. orchestras and artists to the Soviet Union.

The U.S. position on exchanges is still the same as it was before the repression in Hungary: We would like to promote exchanges of delegations and individuals—if they are reciprocal and there's a minimum of propaganda.

• **Broadcast Problem**—But TV and radio appearances on both sides of the Iron Curtain present a new element for Washington to cope with. The real question is this: If Moscow fails to open the door to U.S. broadcasts, will it still try to bypass the U.S. government here—as it did in the CBS interview—and deal directly with U.S. radio and TV networks?

The Administration is extremely skeptical that Soviet leaders will agree to any free exchange of TV and radio broadcasts. Officials think that the Soviet government, on its side, would hedge this kind of exchange with so

many restrictions that the whole idea would have to be buried. Soviet experts here argue the Kremlin could not afford to relax its absolute monopoly over the means of influencing and controlling the Russian people—without courting disaster.

The Administration doesn't fear occasional appearances of top Soviet leaders on TV. It feels that after years of cold war, the American public is too suspicious to fall for any Communist pitch. But the Administration believes that a one-sided barrage over a long period of time could do damage.

• **Soviet Tactic**—What's continuing to rankle Washington, is that the Soviet government negotiated a deal with a major TV network before any official exchange had been worked out. Asked whether CBS had cleared the interview with anyone, CBS Pres. Frank Stanton replied: "Our job as free American journalists is to seek out and report the news. We cleared the interview with nobody."

The Administration does not want to interfere with freedom of the press. But it fears the Soviet government may play off one information medium against another to get access to the public—and possibly succeed, to a limited extent, because of the networks' competitive pride in "getting a story."

To prove that what Khrushchev said on the CBS program—and what other Soviet leaders might say on future programs—rates as propaganda, Soviet experts here point to the anti-U.S. campaign now going on in the Soviet press. It's the old two-faced approach, they say—a friendly look for the U.S. public, a vilifying campaign against the U.S. inside the Soviet Union.

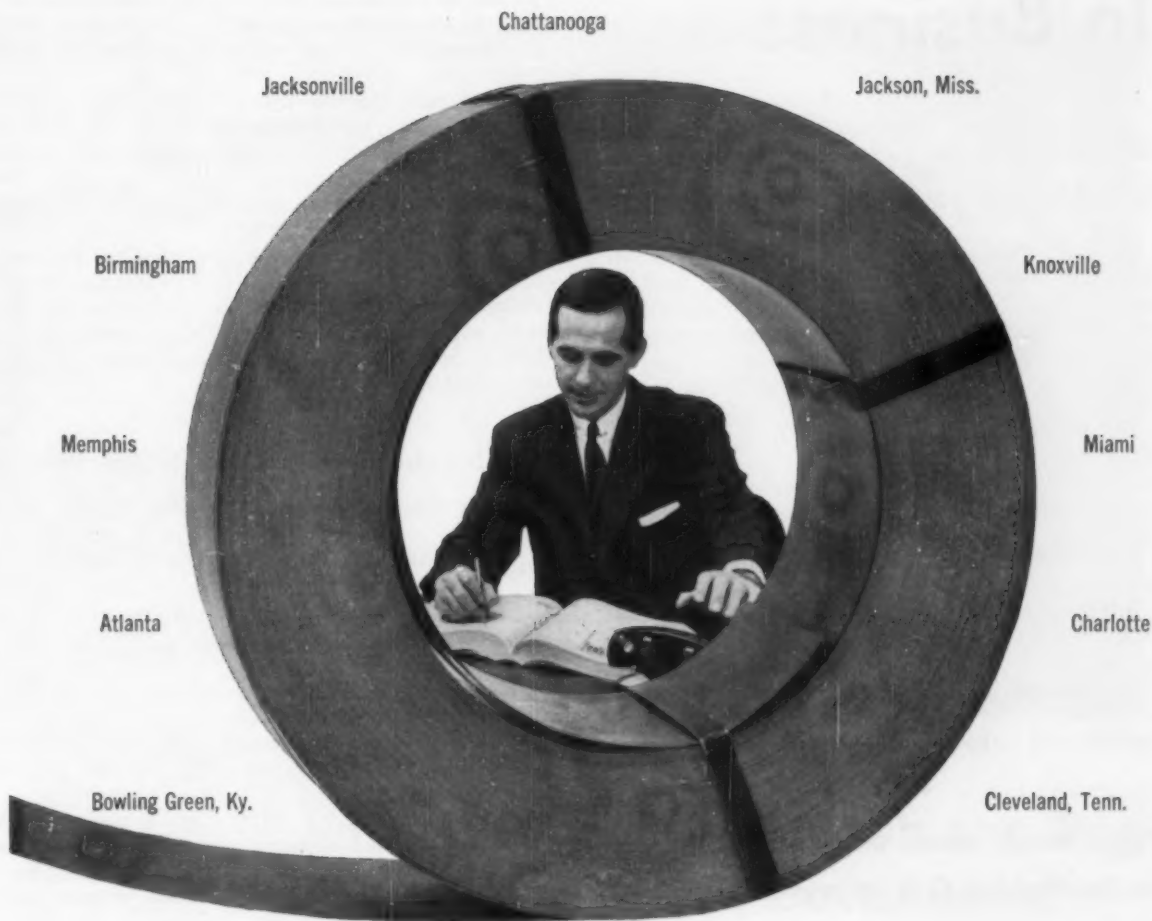
The Administration is keeping an open mind on developing any future exchange program. Last week Secy. of State Dulles renewed the suggestion—made at Geneva—for a trial exchange of a half dozen radio or TV programs. In fact, he agreed to make a personal appearance—in any such exchange.

• **Administration Policy**—At the moment, this is the Administration's general policy in approaching such an exchange program:

- It pretty much rules out any one-shot answer to Khrushchev. That would put the U.S. on the defensive, implying that what Khrushchev said had enough substance to justify an answer.

- It is against any appearance of Pres. Eisenhower on Soviet TV or radios. That would help build up Khrushchev by indirectly equating his importance with Eisenhower's.

- It will demand access to Soviet radio—as well as TV—networks. The Soviet Union has only 4-million TV sets. But it has many times that number of radios for reaching a broad Soviet audience.



Steel company gives customers "branch office" service by telephone

Customers in eleven southern cities can telephone the Solar Steel Corporation's plant in Nashville, Tenn., at no cost to themselves simply by calling a special "local" telephone number.

In each of the cities this number is listed in the telephone directory. It's as if the company has eleven branch offices in the area served by their Nashville plant. The cost: a small fraction of operating one office.

Branch office service is only one of the many telephone ideas that are helping business reach farther for sales and reduce selling costs.

We'd like to tell you more about those ideas that are best suited to your needs. Just call your Bell Telephone Business Office. A representative will visit you at your convenience.

BELL TELEPHONE SYSTEM



In Business

• • •

Schenley Sues for \$39-Million Refund

In Test to Kill "Force-Out" Whiskey Tax

Schenley Industries, through two subsidiaries, this week carried into federal court the liquor industry's fight against U.S. "force-out" taxes. It sued for the return of \$39-million in whiskey excise taxes paid in the Pittsburgh district on liquor still in bond after eight years. The suit is a test for about \$1-billion in industrywide claims.

On the day Schenley sued in Pittsburgh, the Treasury Dept. caused to be introduced in Congress an "anti-windfall" bill that would bar tax refunds on liquor or tobacco unless the taxpayer could prove out-of-pocket loss.

Thomas E. Dewey, for Schenley, argued that the force-out law was unconstitutional because:

- The eight-year limit makes the tax a direct one, hence a federal invasion of a tax field reserved to the states.

- "Due process" was violated because the tax rate was raised during the period when some of the whiskey in question was in bond.

• • •

Philip Morris Moves Into Packaging

As Stockholders O.K. Milprint Merger

Philip Morris, Inc., took its first step outside the confines of the tobacco business this week when its stockholders O.K'd a merger with Milprint, Inc., of Milwaukee. Milprint has been one of the last major independent makers of flexible packaging; sales last year were \$55-million.

In other corporate deals: Standard Pressed Steel Co. plans to acquire Columbia Steel Equipment Co. via a stock exchange. . . . McGraw-Edison Co. has bought the assets of Fairchild Camera & Instrument Corp.'s industries division. . . . In an estimated \$1.7-million deal, Dayton Rubber Co. has acquired 99% of the stock of Cadillac Plastic & Chemical Co. and four associated companies. . . . All stock in Hadacol, Inc., the tonic maker, has been bought by a Chicago group headed by Jerome S. Garland.

• • •

High Court Rejects Antitrust Appeal

Of Kansas City Star; Safeway Fined \$105,000

Things were popping on the antitrust front this week.

In Washington, the Supreme Court refused to upset the Sherman Act conviction of the Kansas City Star and the Kansas City Times on criminal charges that the newspaper illegally monopolized the dissemination of news and ads in the area. Now, if the Justice Dept.

presses its companion civil suit, the newspapers face a fight to keep their radio and television stations, which the Appeals Court said were used to bind the papers' advertisers.

In Philadelphia, the federal district court slapped a \$5,000 fine on the Philadelphia Radio & Television Broadcasters' Assn., which had pleaded guilty to Sherman Act price-fixing charges. And nine radio broadcasting stations were fined \$1,000 apiece, after pleading nolo contendere.

In Fort Worth, another nolo contendere plea found Safeway Stores, Inc., hit with a \$105,000 fine on price fixing charges. Langan A. Warren, former Safeway president, and Earl Cliff, the chain's Dallas division manager, were fined and given suspended prison terms, and placed on probation.

• • •

British Tobacco Men Defend Cigarettes On

Cancer Charges; Robot Smoker Backs Them

The British tobacco manufacturers this week reported the findings of their mighty smoking machine—a pseudo-human contraption that puffs six cigarettes at a time and learnedly analyzes the possible links between smoking and lung cancer.

The findings couldn't have been more pleasing to the machine's sponsors: Benzpyrene and dibenzanthracene—two of the substances accused of helping to produce cancer—were found only in negligible quantities in tobacco smoke.

Dibenzanthracene was detected as one part in 500,000 of smoke. As for benzpyrene, the machine's proud parents said that it indicated that the daily breathing of London's normal air would put as much of it in a man's lungs as the smoking of 100 cigarettes.

After recounting the findings of their machine, the tobacco makers went on to say that they considered the statistics presented by the anti-smoking people to be full of "contradictions and limitations."

• • •

Business Briefs

The trucking industry (page 168) is due for a July 1-2 examination from the Senate Small Business Committee. The committee will hear a report by two Michigan State economists on the industry's mergers and concentrations; the study says the ICC has "favored" larger truckers.

The ICC has given Eastern railroads a 15% boost in railway express rates for less than carload lots. This supersedes a nationwide 4% raise granted in December. ICC says the Eastern roads need the extra amount because of their predominantly short-haul business.

The Commerce Dept. says April imports by the U.S. were \$1.1-billion-plus, 13% above the year-before month, but 2% below this March.

Chrysler Corp.'s search for a top staff marketing man (BW-Nov. 3 '56, p85) has ended right in its own organization. James Cope this week was appointed Vice-President-Corporate Market Planning.

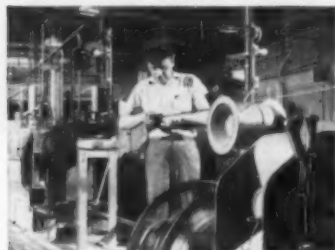
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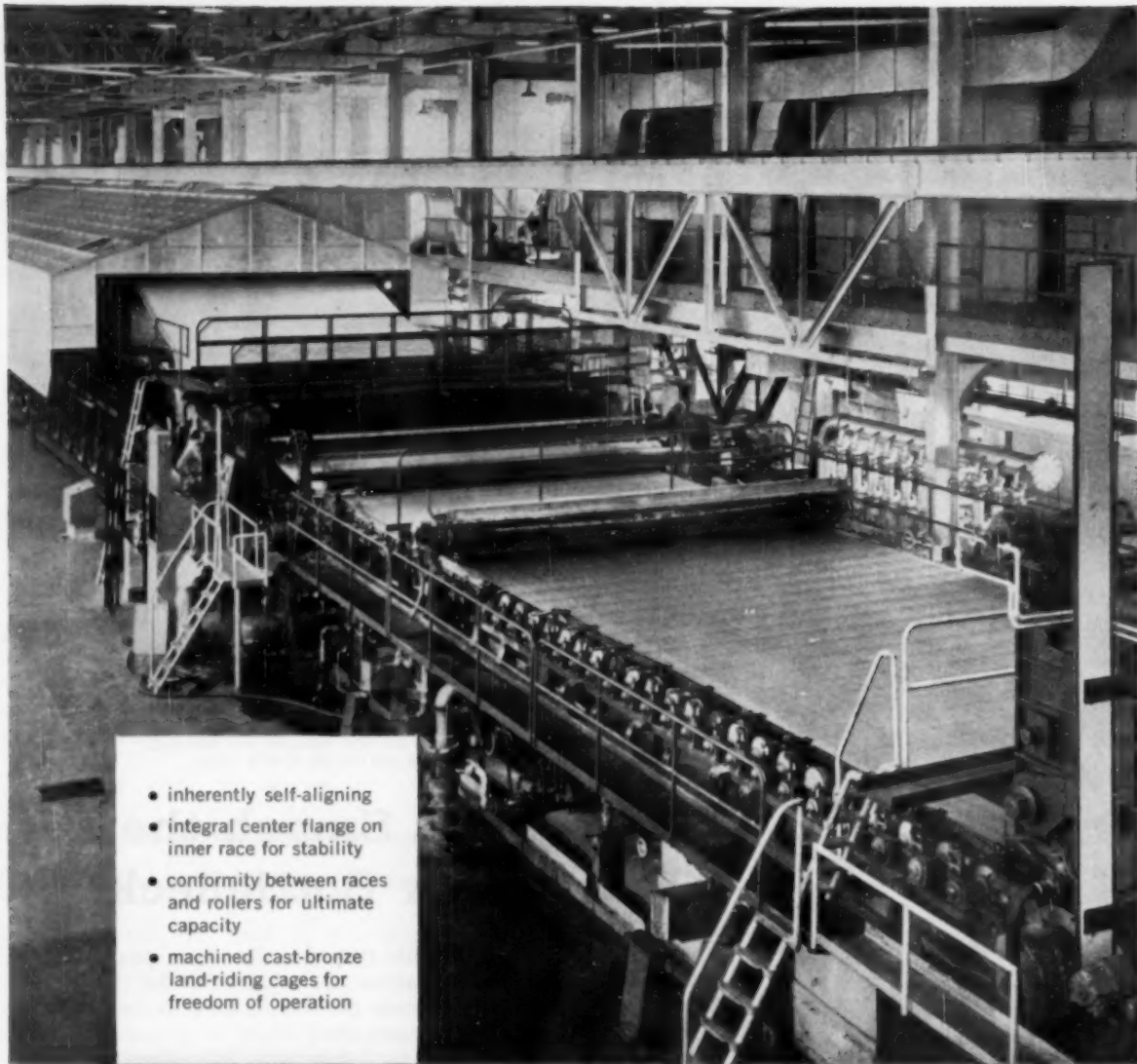
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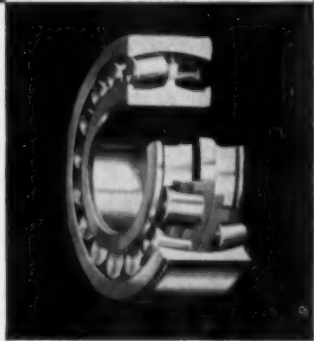
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A New World's Record!

World's record on 50# Kraft bag paper—2,200 fpm—is held by this 232-inch paper machine built by Beloit Iron Works for St. Regis Paper Company at Jacksonville, Florida.

Contributing to this performance are 718 Torrington Spherical Roller Bearings on wire rolls, press felt rolls, top press rolls, paper and felt driers and idlers, calenders, suction couch and press rolls, reels and winders. Inherently self-aligning, these bearings compensate for shaft deflection across the machine and eliminate need for periodic realignment.

Torrington Spherical Roller Bearings are available from stock with straight or tapered bores for shaft or adapter mounting. When you are counting on production, count on Torrington Spherical Roller Bearings for smoother, faster, more economical service from wet end to winder. *The Torrington Company, South Bend 21, Ind. — and Torrington, Conn.*

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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JUNE 22, 1957



The tight credit policy will stand for the foreseeable future.

The Administration position is that it's necessary as an anti-inflation measure. Pres. Eisenhower's advisers support the Reserve Board's contention that under today's business conditions any shift to make credit easy to get and cheap would merely underwrite a sharp price rise that would cheapen the dollar and send living costs up.

The Democratic attack is political. Many Democrats frankly admit this in private conversation and even in public statements. They are hunting issues that they hope will be helpful in next year's Congressional elections and the Presidential campaign two years later (p. 23).

Here's the background: Eisenhower in January proposed creation of a special, expert commission to study the nation's financial system and decide what, if any, changes should be made to meet the needs of a rising economy. Congress turned him down on this. And after the House defeated a proposal by Rep. Wright Patman (D-Tex.), to have its own Banking & Currency Committee conduct an inquiry, the Senate stepped in. It instructed its Finance Committee, under Chmn. Harry F. Byrd (D-Va.), to take a detailed look at monetary policy. That's when politics took over and the Democrats made the decision to attack the hard money policies of the Administration as favoring the rich against the poor, big business against small business, and as loading a bigger interest charge on the national debt that must be carried by the taxpayers of the country.

Can the Democrats capitalize politically on tight credit? There's no certainty that they can. It all depends on the future course of business.

Hard money won't be a telling issue next year if—if times stay good. It will have a certain appeal to home buyers who have been forced out of the market because they don't have enough cash to meet today's down-payment terms. And it will appeal to some farmers and businessmen who haven't been able to get the credit they want at the terms they would like. But it will be hard to make an appealing national issue if jobs are plentiful and business good.

A serious business downturn would reverse the picture.

The Democrats could then go to the country with the argument that tight credit choked off business growth and set the stage for a recession. That's the sort of argument that would have appeal if unemployment should be on the rise and workers upset about prospects for keeping their jobs.

The hearings will be long-drawn out. They will continue through the remainder of this session of Congress and then will be picked up again next year if conditions then indicate that there's political hay to be made. There will be no real effort to rewrite the laws that govern the credit structure, even though some Republicans and Democrats feel that the Federal Reserve System should be under the control of the Executive and thus subject to political control.

— • —

Defense contractors: The Commission on Government Security finally has brought out its study. It contains recommendations on how to prevent government and industrial "leaks" that would benefit an enemy. It's a bulky document, 800 pages. If you have classified contracts, you will want this report. You can get it by writing: Superintendent of Documents, Government Printing Office, Washington 25, D. C. Price: \$2.50.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
JUNE 22, 1957

A new Supreme Court is in the making. Many of you will recall that in 1937 Pres. Franklin D. Roosevelt, just inaugurated for his second term, set out to remake the court. His complaint was that the court lived in the "horse and buggy" days and needed new blood. This was after a series of decisions killing such New Deal programs as NRA and AAA. Roosevelt failed in his court-packing plan, but time changed the court.

The difference today is that the court attack comes from the political right, rather than the left. And it's just about an Eisenhower-made court. The President has named four of the nine Justices, including the Chief Justice. Some lawyers say that it's "a court Roosevelt would be proud of."

The court is definitely liberal in today's political terms.

Start with the 1954 school desegregation decision. It was Eisenhower's Chief Justice, Earl Warren, who handed this one down, with the unanimous backing of his associates. It upset the separate but equal doctrine.

Other turn-arounds have come fast. The Warren court said professional baseball is a sport, so outside the antitrust laws. But professional boxing and football are business, so come under the antitrust statutes. And last year the court held that dependents of military men living abroad came under military jurisdiction—subject to court martial. This year it says that isn't so at all. In the same case, it pronounced its earlier doctrine unconstitutional.

The Chief Justice this week lectured Congress. The court held, in effect, that Congressional investigations must be tied directly to legislation and can't go in for exposures on which Congress has based its fight against Communism. This was one of the so-called Communist contempt cases.

Here's how the new court alignment seems to be developing:

"Conservatives" usually are in the minority. Such old New and Fair Dealers as Frankfurter and Clark, and former Republican Sen. Burton are winding up more and more on the dissenting side. Frankfurter is the most frequent swing man.

Eisenhower's appointees are bolstering the liberal bloc. Chief Justice Warren is the most influential, but Brennan is consistently on the same side with the veterans Douglas and Black. Harlan hasn't earned a label yet. This week he wrote the Smith Act cases; at other times he has been more conservative. Whittaker, the newest man, hasn't yet taken a "seat."

There's irritating friction in the court. Of course the debates in chambers are treated as entirely confidential. Still, word of dispute gets around Washington. It always does. And, then, every once in a while an opinion, whether majority or minority, slips up and tips things off. Note that Justice Clark just this week called the decision in which Chief Justice Warren lectured Congress "mischievous." Members of the court always pick their words deliberately.

The business implications of the present court are easy to read.

There's a leaning toward federal regulation of business. You get the drift in the recent ruling on the government's new case against du Pont's ownership of stock in General Motors. A forced separation has been ordered.



International Harvester has found a better way to keep stored machines in perfect sales condition. It is based on a product of Shell Research.

Here's a dry spell that benefits farmers

Moist weather is dandy for crops, but just the opposite for farm machines. Especially when those machines are new and idle.

To protect farm tractors against rust while in storage—from production line to farmer—International Harvester spares neither time nor money. They have found a new way to give more lasting protection in any climate, *at a fraction of the former cost.*

This new technique uses a product of Shell Research that fights rust on a new principle. Instead of applying hard-to-

remove materials, a chemical powder called *Shell VPI* is blown into cylinders, valve housings, crankcases and transmissions. Here it forms an invisible shield over the metal that keeps moisture from causing rust. For the metal, it's like a long "dry spell." And since *Shell VPI* doesn't have to be removed, the tractor is ready for instant use.

This new and inexpensive way to prevent rust is another example of the versatility of Shell Research. Such leadership pays off in better value, wherever you see the Shell name and trademark.



Leaders in Industry rely on Shell Industrial Products

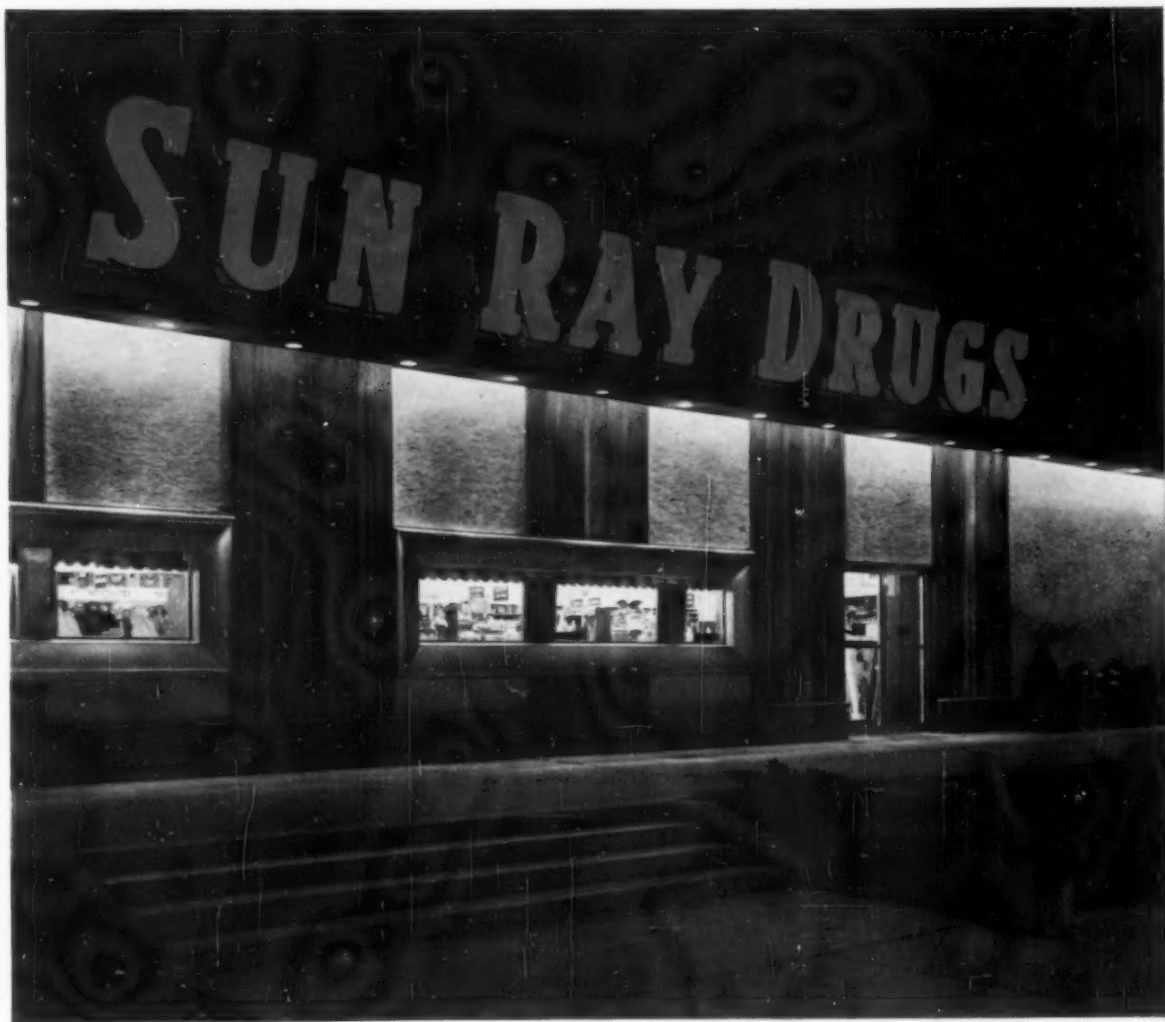
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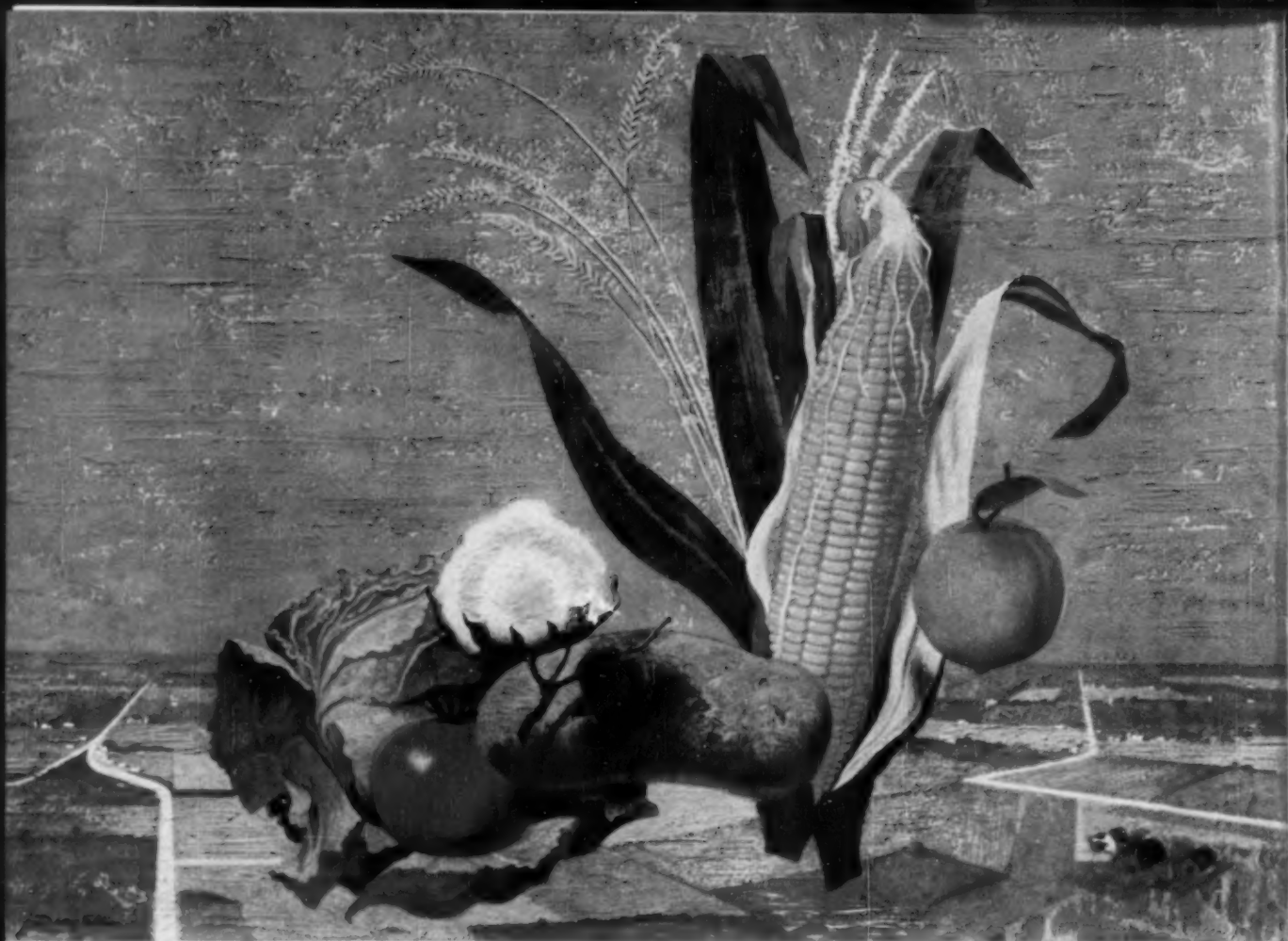


Chemicals for Industry

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Representatives in principal foreign countries



Fertilizers...an answer to tomorrow's food problems

Soil "vitamins"...and bank aid...help harvests keep pace with birth rate

Eighty-five million babies expected during the next 18 years may create future farm problems. Their new mouths will boost our population to about 225 million and will give each farm worker 34 people to feed — he feeds 21 now. To meet the challenge, farmers are shopping for fertilizers with the same growing interest they showed for mechanical equipment a few years ago.

Today's exciting developments in plant nutrients are as much an improvement over the compost heap as the tractor was over the horse. New liquid fertilizers and anhydrous ammonia are revitalizing crop-weary soil and even reclaiming wasteland as tillable acreage.

These test-tube miracles feed the earth with the nitrogen, potash, phos-

phorus and other elements essential to plant growth. Other new chemicals not only fertilize crops, but also kill weeds at the same time.

Manufacturers and distributors of fertilizers often call on First National City Bank for aid and counsel. The Bank helps arrange the financing of new plants and facilities...extends seasonal credit to cover purchase, shipping, and warehousing of raw materials...and speeds collections through its Transcontinental Banking Service in cooperation with correspondent bank friends

throughout the entire United States.

Many of First National City's 70 Overseas Branches, Offices, and Affiliates are located in areas which supply raw materials or are markets for finished fertilizers. This world-wide banking system is an invaluable source of information and an important reason why the Bank has been able to make a real contribution to the development of the fertilizer industry.

Consult us to discover how your business can benefit from having a banker instead of just a bank account.

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First in World Wide Banking

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CARRY FIRST NATIONAL CITY TRAVELERS CHECKS...SAFE...SPENDABLE ANYWHERE



THE EDELSEL SIGN, green and white, will be appearing this month on dealers stores, with cars due later. It means that . . .

Ford Gets Full Line at Last

Ten years of preparation reach a climax, with the motor company achieving integrated marketing with Jim Nance hired to pilot the operation as top planner and strategist for distribution.

SOMETIME in the next month a large, white E within a green circle will be hoisted above glass-fronted stores here and there in the U.S., and there will be a new nameplate along the country's automobile rows. The first Edsel dealers will be in business, although until early September they'll have only the sign to whet the interest of prospective customers in the new medium-priced car of the Ford Motor Co.

When the signs go up, a decade of planning will have ended for Ford, and the auto industry's most intensive chips-down battle for markets will have begun. The Edsel will be the emergence of the Ford Motor Co., 54 years after its birth, as a full-line producer ready to offer car-for-car competition to GM and Chrysler.

To the industry and to marketing men, the green-and-white Edsel signs tell an additional and perhaps more significant story. Ford has found a way to integrate all of its marketing efforts. Down the 10-year-long road of preparation for the Edsel, Ford officials have spurred their analysts into the development of new techniques to pinpoint all-important dealer locations (page 52), and Pres. Henry Ford II and Chmn. Ernest R. Breech have built a new central management structure for marketing.

In the comeback battle launched by Ford and Breech in 1946, the company first rebuilt its management and financial organization, then its plants, engineering, and styling. For reasons of circumstance, during all this recon-

struction, one area of management concern—organization of marketing policy—could, and did, wait. Now the gap has been closed. With a car for every price class, Ford has turned over the organization of a top management marketing staff to one of industry's most ardent exponents of full-line marketing—James J. Nance (cover).

I. Genesis of a Job

The development of the new car and the shepherding of it to showrooms by the Edsel Div., and the appointment of Jim Nance and his subsequent organization of a marketing staff, are distinctly different developments—yet inter-related by Ford's postwar history.

In a generalized sense—which even as a generalization would be disputed by the auto companies—the difference between success and failure in Detroit is no longer product, but merchandising. All companies today turn out accept-



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Armco Steel Buildings are engineered to avoid the costly methods of conventional construction.

Standardized parts are delivered to your site ready for assembly. Interlocking wall panels save framework and exterior cover. These precision-manufactured units go together fast... speed up move-in time. There is no time-consuming cutting or fitting.

The result... you buy more "building" and less overhead.

The interiors of Armco Steel Buildings can be finished just like any other building. This makes it possible to house an office or display room in part of the building, while the remainder is used for production, warehousing or other purposes.

Before you make a decision on your building needs, be sure to get the full story on Armco Steel Buildings. Armco Drainage & Metal Products, Inc., 927 Curtis Street, Middletown, Ohio.

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ARMCO STEEL BUILDINGS



able, suitable, and well-engineered cars at comparable prices. It is marketing strategy and sales tactics that spell the difference. And as the strategy and tactics have had to change with the times, the organizations to develop them also have had to change.

In Ford's case, its selling organization during the reconstruction period was adequate for the company's needs. So, Breech says, "We greased the wheels that squeaked." Ten years ago, talking to Ford dealers, Breech said that when Henry Ford II and he set out to rebuild the company they found two great assets: the Ford name and the dealer organization. Recently, shuffling through some old notes, Breech said, "I told them at that time, 'We have strengthened the strongest selling organization in the motor car industry.'"

• **In the Background**—Accordingly, Ford and Breech felt they could devote their first efforts to more pressing matters, although with the nagging knowledge that problems for the selling organization lay not too far ahead.

It's a familiar story now, how and why Ford began planning for a new, medium-priced car back in 1948 (BW—Nov. 24 '56, p. 30)—less than 20% of Ford output is in the medium-price class as opposed to better than 40% at both GM and Chrysler. What is only now coming into focus is the fact that even at that time Ford and Breech realized that as Ford's business grew, and especially if the additional car line ever materialized, the company would need a broader approach to merchandising its products than could be handled in the Merchandising Subcommittee of the Administration Committee or in the then-existing office of the vice-president for sales and advertising.

• **Dealer Policy Board**—Even before the proposed new car could be brought to the showroom, Ford and Breech were aware that, when the sellers' market ended and the traditional competition returned to the industry, some dealers were going to be hurt; and the dealers' nerve ends would feed the pain back to the factory. Beginning in 1950, Breech says, sal. vice-president John R. Davis was drawing up plans for a "dealer policy board," which would be a first step toward meeting new problems that would arise in automobile marketing.

Then Davis, who was to head the board, suffered a heart attack; the auto industry was under materials controls due to the Korean War, so both the dealer board and the Edsel project were shelved temporarily.

The dealer board idea was resurrected a year ago—in the wake of the "revolt of the dealers"—with Benson Ford at its head, and Walker Williams, vice-president, sales, was assigned to the board as he had the closest relations

with dealers of anyone at the staff level. For months Ford functioned without a vice-president for sales, and the path was clear for a new concept of staff management of marketing for which there was now a need. For several years the separate divisions—Ford, Mercury, and Lincoln—had been doing thorough, self-contained sales and marketing jobs independent of each other. It was time to give them some supervision and coordination at the top. Marketing decentralization had gone a bit too far.

II. Man for the Job

Breech's idea of marketing is simply expressed: "getting our products from the factory into the hands of the people who are going to use them." In Breech's book, and that of many another veteran auto maker, the man who created the mold for that procedure was Richard H. Grant, now retired, but from 1929 to 1944 a General Motors vice-president in charge of distribution—a "marketing statesman," Breech calls him.

Grant first made his mark at National Cash Register Co., then helped C. F. Kettering and E. A. Deeds form Delco, moved on to Frigidaire, Chevrolet (which he made the best-selling car), then into GM's central staff. Along the way he established procedures and principles that still are the foundation of auto marketing. Among them are: Use sales forecasts to schedule production, rather than the other way around; have the right product; know the potential of each market area; have utter simplicity in all presentations; use all kinds of advertising.

"There's only one man today who comes close to Dick Grant," says Breech, who worked with him at GM. "That's Jim Nance."

• **Nance's Career**—Nance, now 55 years old, also came out of National Cash and was advertising director and later commercial manager of Frigidaire (which at the time was part of Breech's group as a GM vice-president). General Electric's C. E. Wilson, with whom Nance worked on the War Production Board, sent him to Hotpoint, Inc., as executive vice-president after the war. President a year later (1947), Nance converted Hotpoint into a full-line producer of major appliances, set up production facilities new to the industry, and in four years increased sales by more than 10 times.

In 1952, Nance jumped into a new industry as president of Packard Motor Car Co. He took the job at the insistence of a group of bankers who believed he could put all four remaining "independent" auto companies together into a full-line company. He did combine Studebaker and Packard into a full-line company, and there was still

Highway building across the country ...is sped by an electric arc

All over the nation, you can see vast new roads being built. Rugged machines dig . . . scrape . . . haul . . . dump . . . to make your superhighway take shape.

Producing road-building machines involves special problems for their makers. Here, LINDE lends a hand. With UNIONARC welding equipment, heavy steel sections are joined with joint areas stronger than the steel itself.

Each of LINDE's different welding methods is designed for certain types of jobs. One is for joining metals that ordinarily are difficult to weld. Another gives sound seams in very thick steel. UNIONARC welding, a method recently

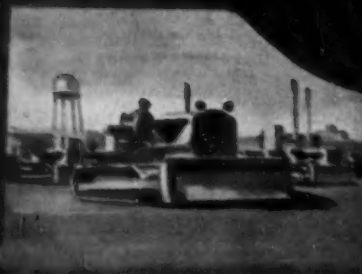
developed by LINDE, permits welding down-hand, vertically, or overhead—with savings up to 50%.

For half a century, LINDE has been engaged in research, development, and production of welding machines and methods, for both gas and electric operation. For information on UNIONARC, and a copy of the booklet, "Modern Methods of Joining Metals," write or call your nearest LINDE office.

LINDE COMPANY, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y. In Canada: Linde Company, Division of Union Carbide Canada Limited.

For the best in electric welding—look to LINDE!

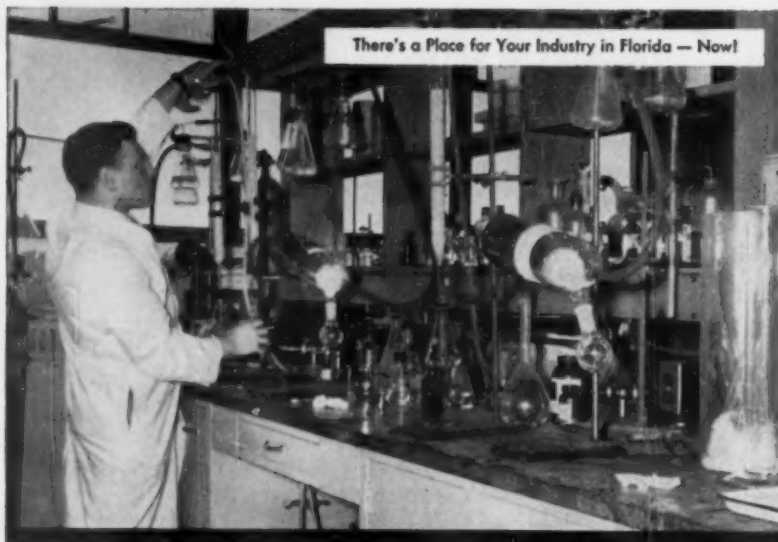
The terms "LINDE," "UNIONARC," and "UNION CARBIDE" are trade-marks of Union Carbide Corporation.



Linde
TRADE MARK

**UNION
CARBIDE**

Electric and welding methods developed by Linde are used to help make tough and durable road-building machines for building the nation's highways.



Get the Facts About FLORIDA'S Raw Material Resources . . .

Florida offers you a variety of natural resources including rare earths [zirconium, titanium, hafnium, thorium, and uranium]; phosphates; dolomite; limestone; forest, farm, and marine products. And many other industrial raw materials are readily available from nearby areas.

In Florida's natural and available raw material resources may lie opportunities for you. More than 7500 products are now manufactured, processed, or grown in Florida and marketed under 12,000 brand names. The list is growing at an amazing rate. In addition, you'll also find that Florida is rapidly becoming the nation's favored area for research and laboratory facilities in many fields . . . because engineers and technicians like to live in Florida.

While you're thinking about Florida, consider, too, the excellent air, rail, water, and highway transportation facilities, relationship to domestic and Latin-American markets, ample manpower, ideal climate which is attractive to all classes of workers, tax structure favorable to business and industry, and low plant construction and maintenance costs.

Whatever your reason for looking southward for a new plant, branch plant, research facility, warehouse or office site, look twice at Florida.



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hope of achieving the original goal when the project came apart at the seams when Nance couldn't raise money to execute the two cardinal tenets of his whole business philosophy: Develop new products, and develop a strong distribution network backed by heavy promotion (BW—Aug. 11 '56, p. 26). Because he never had a chance to demonstrate the marketing concepts on which his reputation was based, there was a superficial impression in Detroit and elsewhere that he had failed in the auto business, and dragged S-P down with him.

Out in Dearborn, however, Ernest Breech was not concerned with superficialities. He, and the other top auto men in Detroit felt that Nance had done more than they had thought he could. So, after Nance had declared he was resigning as S-P president, Breech passed him the word that there was a job waiting for him at Ford.

• **A Step "Down"**—Nance had been president of two very large corporations. After winding up at Studebaker-Packard, he turned down the presidency of Montgomery Ward and a high executive post at Westinghouse for a vice-presidency at Ford. "I would not have taken a step down in position for any company other than Ford," Nance says. It's not hard to see why.

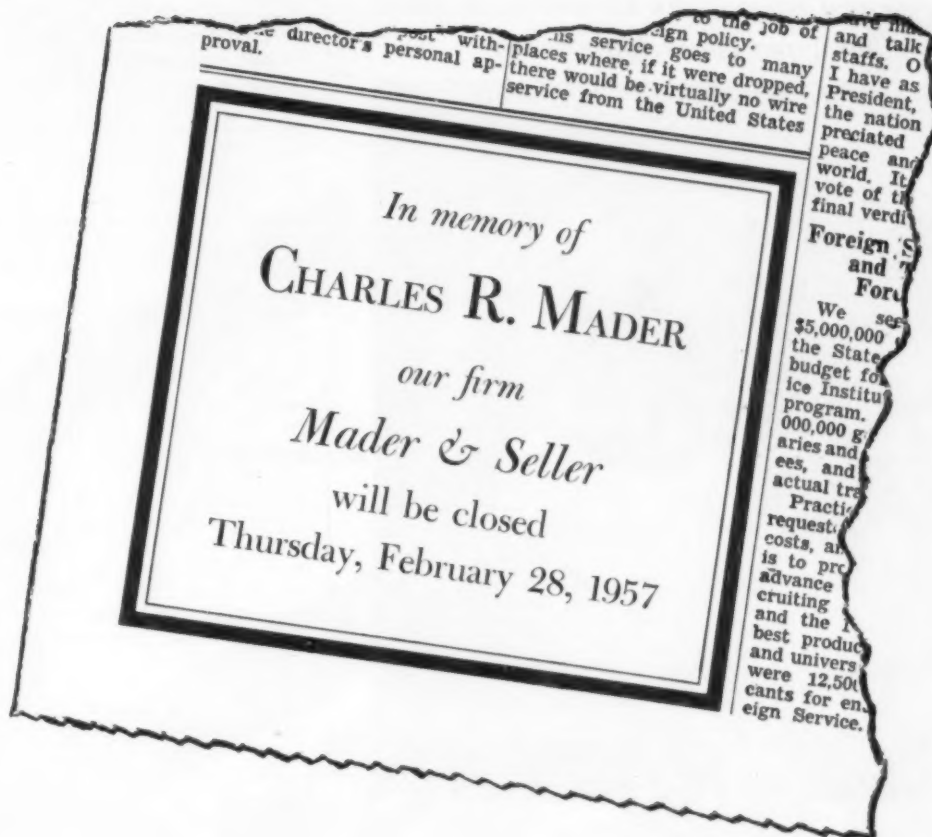
Nance is responsible only to Breech and Henry Ford II. He will be chairman of a Marketing Committee of staff vice-presidents, plus Breech and Ford. He is a member of the Administration Committee, the Product Planning Committee, the Styling Committee, and the Scheduling Committee. He is not concerned with selling; he is concerned with management.

III. The Job

Nance's job, according to Breech, is "to anticipate problems, not put out fires."

In this anticipation of problems, Nance is concerned with practically every activity at Ford save engineering and manufacturing. Delegated to his Marketing Committee is the obligation to advise the company president and chairman on such matters as: what kind of cars to build; market penetration goals for each of its cars and trucks; advertising, selling, and sales promotion programs; how many dealers the company should have and where they should be located; what kind of franchises should be granted; plans for developing future dealers, retail salesmen, and company marketing personnel.

• **Customer-Minded**—Nance views his job as "making everybody connected with the Ford Motor Co. customer-minded. It all comes back to hitting the cash register." The development of a marketing program, he explains, is a four-step operation. First is the



A partner's death doesn't have to end the life of your business

All too often the death of a partner spells the death of a business. Sometimes the heir is a disinterested party who insists on selling out.

In other instances, relatives who consider themselves capable try to step in and run the business their own way. In either case, all you have built can be quickly torn down.

You can be certain this won't happen to your partnership by taking some simple precautions now. First, ask your attorney to draw up a Buy and Sell Agreement for the purchase of a partner's share in the

event of death. Then tell your Travelers agent or broker you want Partnership Life insurance to provide money for the purchase.

Partnership Life insurance with The Travelers costs much less than you think—usually less than the interest alone on what you would have to borrow to purchase the deceased partner's share. It's a small price to pay for the confidence that the business you're building today will be here tomorrow.

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prints better, types better, looks better**



**The reason for Hammermill Bond's
finer quality is right in this picture—
hardwood's finer fibers**

WE PHOTOGRAPHED this lady buyer on a Hammermill tree farm to dramatize the fact that Hammermill Bond is now made with *hardwood's* finer fibers. The secret is the exclusive process that produces Neutrancel® pulp. Blended with other quality pulps, Neutrancel gives new Hammermill Bond a smoother, more velvety surface . . . helps your business messages make a better impression than ever before.

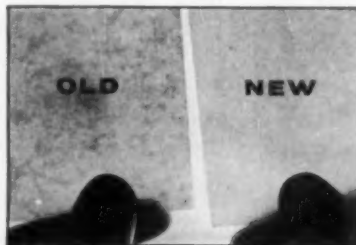
See for yourself why hardwood's finer fibers make the new Hammermill Bond more readable for printing, typing, writing and carbon copies. Hold a sheet of new Hammermill Bond up to the light. Or look at the photos at right. Notice the more uniform distribution of fibers. Papermakers call it "formation"—a key quality in fine paper.

Neutrancel also increases bulk and opacity, gives the new Hammermill Bond a better appearance, a heavier feel that says "quality."

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Hammermill papers that 1) print better—ask your printer; 2) type better—ask your secretary; 3) look better—see for yourself! Ask your printer to show you samples. Hammermill Paper Company, Erie, Pennsylvania.

Printers everywhere use Hammermill papers. Many display this shield.



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BOND**
with Neutrancel's finer fibers, costs no more

initiation, development, and evaluation of plans—which is the responsibility of the divisions and Nance's office. Second, management approval is obtained through the Marketing Committee. Third is the execution of the approved plans—strictly a division function. Finally, division performance in the execution of the plans is evaluated by Nance's office for the Marketing Committee, which is management.

To formulate and evaluate plans, Nance is gathering a small corps of specialists.

• **Dealer Validation**—Right now the major job of the Nance specialists rests with several men who work with the "Dealer Validation Panel," which was set up before the Nance appointment. It is the machinery by which Ford determines where it will have dealers to sell each of its cars. As such, the panel is intimately involved in the Edsel.

The Validation Panel does not select dealers—that is a division function. What happens for instance, is that N. K. Van Derzee, assistant general sales manager for Edsel, sits down with men of comparable rank from Ford, Mercury, and Lincoln around a map of a particular market area. They point out where each of their divisions wants dealers. Then they thresh out conflicts.

The division market analysis men have full authority to agree to decisions binding on their divisions for non-metropolitan markets. For metropolitan areas, the Validation Panel recommends dealer sites to the Metropolitan Marketing Committee, which consists of the general sales managers of the divisions. Any conflicts in this committee are resolved by Nance and Robert S. McNamara, group vice-president for all cars and trucks.

• **The Pattern Shift**—The Validation Panel is as good an instance as you can find why Ford needed a vice-president for marketing. For, regardless of whether there was an Edsel program, the entire dealer network of Ford (as well as other auto companies) is in a state of flux. Some areas once rich in car sales potential have dwindled; new ones have come into existence as the population and income patterns of the nation have changed. Where do you try to close out or consolidate dealerships, where do you locate new ones, and for what lines of cars? That is a top management decision for which Ford needed, and now has, machinery.

Machinery always needs tools. The tools for the Validation Panel, for instance, are the exhaustive analyses the divisions conduct to defend their choices of dealer location.

The Edsel Div., with no patterns to work from, had to invent new tools starting from scratch. How it did the job is told on the following pages.



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Short or cross country haul... dry or liquid cargo, Highway Trailer offers carriers especially engineered for every type of payload. Its production of "piggy-backs," for example, includes refrigerated units for shipment of fresh meat from packing plants to store by road and rail without re-handling.



Design improvement is a constant theme as Highway keeps pace with industry's needs. One recent innovation: this new dry bulk hauler for pulverized materials that can be automatically unloaded by self-contained conveyors.



Highway also serves the nation's public utilities industry. A wide variety of utility bodies (shown), earth boring machines and related equipment are designed and produced for the construction and maintenance of utility lines. Highway also recently introduced a self-contained mobile telephone exchange, capable of providing service for as many as 600 lines.

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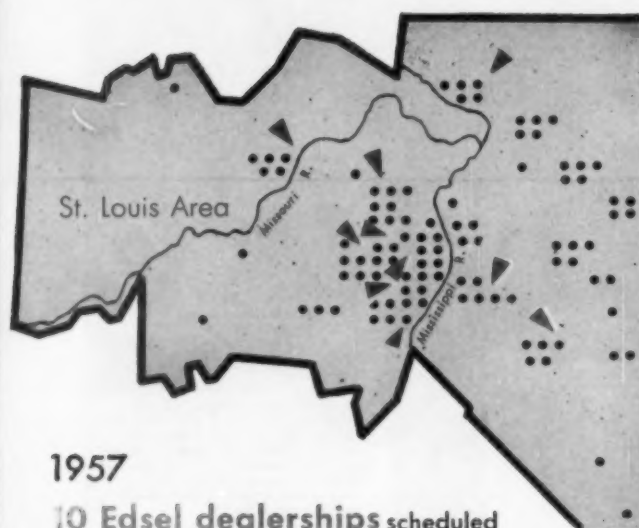
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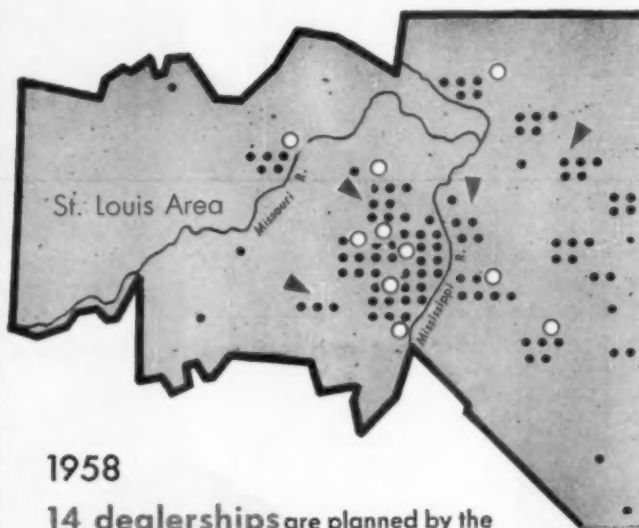
Picking Dealerships to Market a Brand-New Car

Here's Edsel's plan for



1957

10 Edsel dealerships scheduled to open by Dec. 31, 1957 in prime market sites.



1958

14 dealerships are planned by the end of next year in competitive areas.

◀ Edsel dealers established during the year. ○ Edsel dealers established during previous years. ● Competitors

How to Build a Dealer Empire:

Auto industry says it's the men who sell who hold the fate of a new car. Ford has brought some new techniques to picking the men and the places for its new entry in car race.

THE MAPS on these pages show one of Ford Motor Co.'s major tools in launching the Edsel—a systematic method of finding where to place dealers to tap the most likely customers. Finding it was one of the most important things Ford had to do.

Just how important is made clear by the head of one of the big auto companies, who says it's easy enough to get started in the automobile business. He claims that financing, engineering, and manufacturing are no stumbling block. Dealers are; he believes it is nearly impossible to scare up enough dealers to put a new make of car across.

History is on his side. Not since the 1920s, or even before, has a new car entered the lists and survived. Thus, lack of a strong dealer organization wrecked Kaiser Motors' passenger car career. But now Ford Motor Co., with its forthcoming Edsel, is challenging the belief that you can't build a new dealer organization from scratch.

• **Sizable Bet**—By the time the drapes come off the Edsel in September, Ford will have bet \$250-million (some of

which is recoverable) that it knows how to set up an enduring distribution channel for a new nameplate.

The Edsel will be the most expensive new product introduction in history. Still, high cost is inevitable for new things in the auto business, so the sheer amount of money wrapped up in the Edsel project isn't what Ford has at stake at all. What really is at stake is the reason for the Edsel: Ford needs a bigger piece of the auto market to increase the company's rate of growth; it can get that only by offering buyers a wider choice of products.

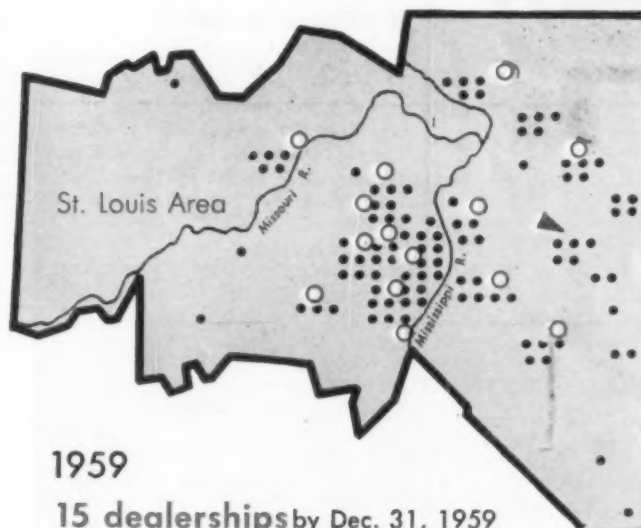
I. Why Another Car?

In any company that, like Ford, is governed by committees, you can't say that new ideas are flashes of inspiration from any one individual. Still and all, the one man at Ford who probably pushed a new-car project harder than any other was Lewis D. Crusoe (recently retired executive vice-president) with his pithy comment: "We are growing customers for General Motors."

Crusoe and other Ford executives seriously believe that some day Ford can sell more cars annually than GM. If that goal is to be reached, figures such as these have to be changed: In 1955, GM sold 1,548,500 cars in the low-medium price bracket, or nearly 70% of the total; Ford sold 371,800, or 16%. In the upper-medium price grouping, GM sold 246,300, or 56%; Ford sold 13,700, or 3%. Even Chrysler exceeded Ford sales by a tremendous margin in the upper-medium price bracket, and was only slightly below Ford's share in the low-medium price group. Ford has had one car, Mercury, with about 3,000 dealers selling against six cars and as many as 15,000 dealers. If a Ford owner goes shopping to upgrade himself to a medium-price car, the Mercury is the only product in the "Ford family." If he doesn't happen to like the Mercury he has a wide choice of substitutes at GM or Chrysler. That's what Crusoe meant.

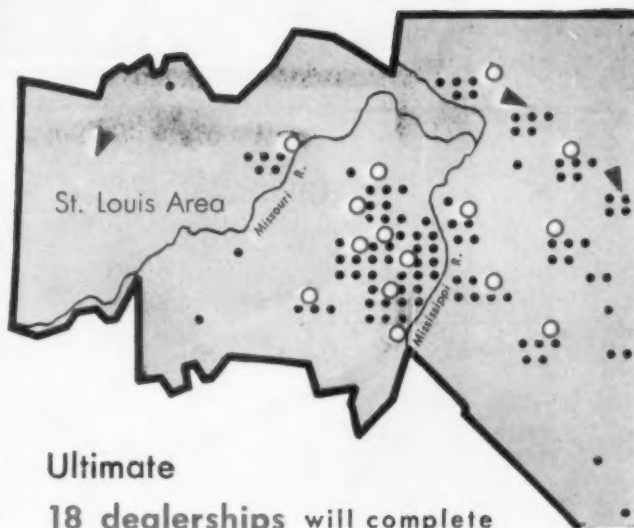
• **Korean Interruption**—Ford officials have been aware of this imbalance since 1948 (page 45), but preliminary planning was interrupted by the Korean War. Work resumed in 1952 in the Forward Product Planning Committee of Lincoln-Mercury Div., under the direction of its assistant general manager, Richard E. Krafve.

competing in St. Louis area



1959

15 dealerships by Dec. 31, 1959 will bring Edsel close to goal.



Ultimate

18 dealerships will complete Edsel's present plan for market penetration.

Strategy of the Edsel Campaign

These studies convinced the company that a new car was practical, and in April, 1955, a "Special Products Div." was formed, with Krafve as general manager. (Krafve was elected a company vice-president last fall when the project was officially named Edsel Div.) Meanwhile, confident that the plans would be approved, Krafve had put people to work on preliminary styling and on a complete breakdown of medium-price car sales in each of the nation's 3,072 counties.

• **Four Series**—The basic decisions on which the Edsel project moved forward were these: The economical production figure—the "standard volume"—would be 200,000 units a year. There would be four series of cars—since named Ranger, Pacer, Corsair, and Citation. While the prices would blanket Mercury prices, there would be a car in between Ford and Mercury on the low end, and in between Mercury and Lincoln on the high side. The styling would be distinctive, attempting to establish exclusive identity at the front and at the rear—the Edsel has a vertical, prow-like grille at front and horizontal taillight clusters, but no fins. The car would not be conventionally styled. "It has to look different," says one Ford man, "or who would buy it?"

The most daring decision of all—although dictated by necessity: The car would be sold not through the Ford and Lincoln-Mercury dealers, but by a separate dealer force.

Only in this way could the necessary concentrated sales effort be applied (the Edsel will be dualed with other Ford-produced cars in areas where sales po-

tential will not support separate dealers).

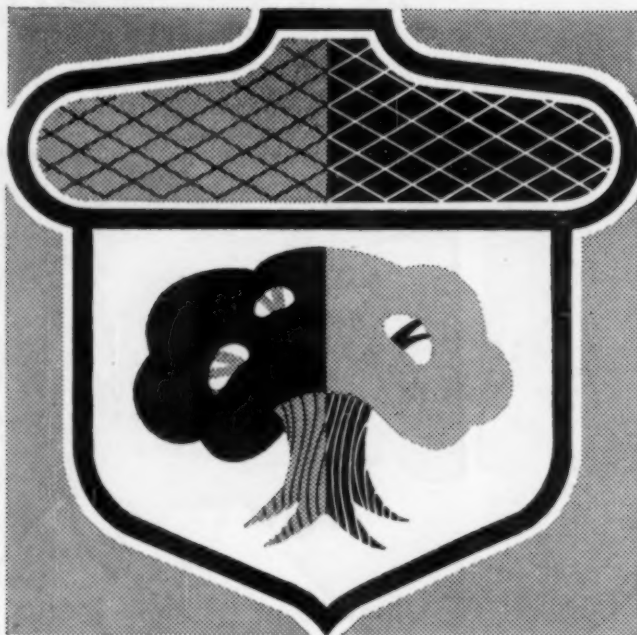
These were the ground rules for Krafve and J. C. (Larry) Doyle, who came from the central staff sales office to be Edsel's general sales manager. Organizationally, they had a two-fold job—build a field selling force, and line up dealers. But before they could even start, they had to find the answers to



R. E. KRAFVE has piloted the Edsel project since its resumption five years ago.



LARRY DOYLE, general sales manager, helped Krafve build the dealer organization.



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Within the last 5 years, for example, The Citizens & Southern Banks have added 30 new services—plans and programs that are boosting the profits of customers doing business in Georgia and the Southeast, both immediately and over a period of time.

Among the ways in which The C&S is creating new profit opportunities is a plan for short-stopping collection of Southeastern checks . . . freight bill payment plan . . . small business credit and financial counseling . . . dealer sales financing and floor planning help . . . a program to rebuild Georgia's sheep industry . . . and a live-wire Industrial Development Department.

For other examples of creative C&S banking and the full story of The C&S in 1956, write today for your copy of the bank's annual report.

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AND AFFILIATES IN GEORGIA



Members FDIC

ATLANTA: Broad & Marietta Streets, Atlanta 2, Georgia
NEW YORK: 500 Fifth Avenue, New York 36, New York

three questions: Where could they find at least 200,000 buyers a year? How many dealers were necessary to get those buyers? Where should the dealers be located?

II. Where to Sell It

In May, 1955, Doyle turned over to H. A. Pries, a one-man "dealer planning group," the formidable task of the county-by-county breakdown of sales. He was to map the country's 60 major metropolitan market areas and designate where the new car should have dealerships. Before Pries finished the job he had nine men in his group. None was a professional planner; all had field selling experience. That was part of Doyle's campaign to build a field selling organization.

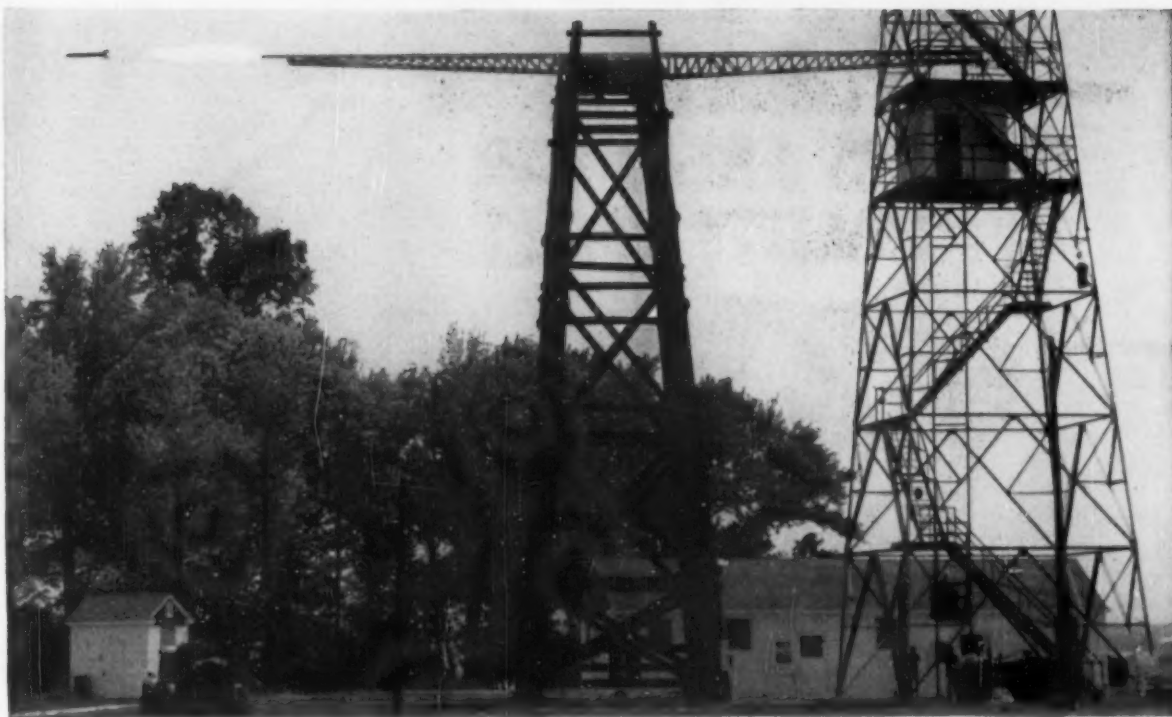
The Pries group would begin with the statistics for an area—population, population over 21, number of families, number of families with income above \$4,000, family income, median income, median value of homes, percent dilapidation of homes, and automobile population. Then other factors were considered—locations of the income groupings, location of shopping centers, traffic flow, where the "automobile row" was and how vital it was, locations of other auto dealers.

• **Statistics**—All this information was plotted on maps of the areas, then the sites for the Edsel dealers were selected. This was fine as a statistical study. But by the time 15 metropolitan areas had been plotted, Doyle decided his analysts had better get out and see for themselves how good their sites were.

In almost every case, the locations of Edsel dealers had to be revised. For the areas looked different when the men drove through them than they did on maps. A shopping center, for instance, might turn out to be in an over-built area with no indication of future growth. An automobile row that appeared good on the map would turn out to be dying—in one case there were only three dealers active where there had been seven. The investigators found new arterial highways and expressways not shown on their maps.

In the end, the planners always cautioned: "The symbols must not be interpreted to mean . . . a specific street intersection . . . but instead . . . they represent a satisfactory area. . ."

• **The Way of It**—The kind of maps that the analysts came up with is illustrated by the one of St. Louis. How they pick the Edsel sites is indicated by some of their comments: "Lindell Boulevard is a major east and west street connecting suburban St. Louis with the downtown business district. Eleven dealers are located in this general area . . . Ferguson and the surrounding area is in the process of



Experimental rocket being launched from tower at DOFL's Maryland test facility.

U. S. Army Photo

ELECTRONIC AMMUNITION THAT "THINKS" IS DEVELOPED AT ARMY'S DIAMOND ORDNANCE FUZE LABORATORIES

Since 1940, scientists and engineers at Diamond Ordnance Fuze Laboratories, with their industrial contractor counterparts, have made important contributions to electronic ordnance. These include the proximity fuze, greatly improved fuzes for antitank and other special ammunition, and, more recently, fuzing systems for guided missiles. Other basic results of DOFL's research and development teams are new electronic systems which increase the accuracy of measurement of distance, velocity and direction, new electronic and mechanical control systems, and new and radical components and materials. DOFL's main laboratory is in Washington, D. C., and it maintains an extensive test facility at Blossom Point, Maryland. Over 1400 scientists, engineers, technicians, and supporting personnel work in these centers.

Electronic ordnance was born in World War II. Ammunition of this type, a DOFL specialty, senses the presence, distance, and direction of a target and causes the warhead to function at the instant when it will inflict the most damage. Electronic control can be compared to having a sharpshooter in every piece of ammunition. The accurate effect is devastating.

Many advances in ruggedness and miniaturization, pioneered by DOFL, are contributing significantly to peacetime technology. Typical industrial products which sprang from ordnance programs are printed electronic circuits, tough and tiny electronic tubes, and rigid mounting of components in solid plastic blocks. These valuable by-products have contributed heavily to the ability of DOFL's industrial teammates to design safer, smaller, and better components.

This is one of a series of ads on the technical activities of the Department of Defense.



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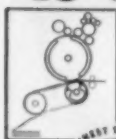
31-10 Thomson Avenue, Long Island City 1, New York
Beverly Hills, Cal. • Dayton, Ohio



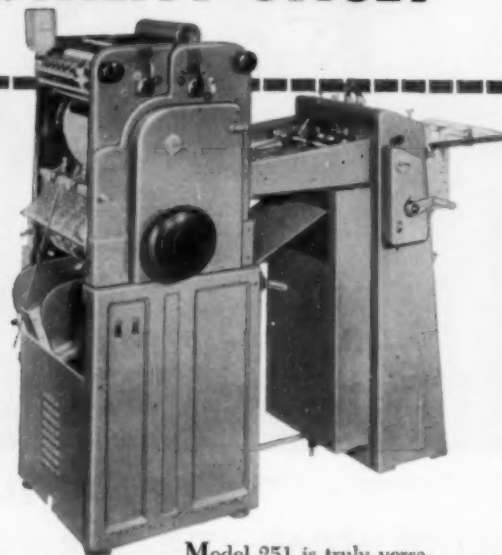
Class of technicians at Ford Instrument is instructed on techniques to be employed in assembling equipment for Army Ordnance project.

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tremendous growth. Good quality home construction is built and in the process of being built at a very rapid pace. This is by far the most dynamic area of St. Louis... in 1956 the population of East St. Louis is 88,000. This represents a 7% increase over 1950... Gravois is a mature residential area with a heavy concentration of families earning over \$4,000." In four cases it was noted that recommended sites were close by good retail shopping centers or areas.

The 60 metropolitan market studies were finished in September, 1956. Non-metropolitan sites already had been tentatively located. The county studies indicated where the heaviest concentrations of medium-price car sales were; regardless of metropolitan area, there would have to be Edsel dealers at certain intervals to take care of service. Adding up the totals, the number of Edsel dealers necessary to get desired coverage on Introduction Day came out to 1,184 and the eventual number of dealers figured to be about 3,000.

• **Recruiting**—As each group of studies was completed, Doyle was able to determine the extent of his field force there, so he was lining up sales people even before all the market areas had been analyzed. To Krafve and Doyle, the field force is one of the most important units in the Edsel organization. The five regional managers report directly to Doyle, not through an assistant sales manager as is customary, and Doyle regards them as his staff.

Because of this emphasis on the field force, none of the dealer sites was finally located until approved by the field men who would handle the area. (The planners themselves were so impressed with the importance of the job to be done in the field that they all took field jobs.)

• **Fast Growth**—When Doyle appointed his first regional manager in February, 1956, he had a marketing group of about 50. It had doubled by July, was up to 149 on Jan. 1 of this year and now is 189. And the field force is 746. Doyle had 2,000 applications for jobs, so his men came from all over—one department head formerly was an associate professor of marketing at the University of Utah—but at Doyle's insistence most had previous Ford Motor Co. experience.

With dealer sites located, and a sales force recruited, Krafve and Doyle early this year had to forge the final link in the distribution chain—dealers.

III. Who Will Sell It

To be an Edsel dealer a man must have a certain splendid faith in the Ford Motor Co. That isn't a contractual requirement, of course, but consider the circumstances:

To sign a selling agreement a man

*from Vinyl Plastisols
may come the easiest
product improvements
you ever made...*

they made this anchor both tough and "gentle"!



New vinyl dispersions are fused on METALS, FABRICS, PAPER, to produce tough, permanent finishes . . . or molded, without pressure, into high-grade low-cost products.

A vinyl plastisol, dip-coated on the anchor above, became a permanent finish, unusually resistant to corrosion and abrasion, literally cushioned for quiet, "gentle" operation.

Vinyl plastisols are extremely versatile. Available in a wide choice of clear-through permanent colors, they can create a smooth, textured, or embossed finish. Coated on fabrics and paper they produce fine luggage, wall and floor coverings. Coat them on metals before forming—even stamping won't rupture the flexible finish. Slush-mold them into rain boots, dolls' heads. They are permanent, flexible sealants. Use foamed vinyl plastisols for upholstery or insulation.

"The Vinyl Plastisol Story" tells you a great deal more about this quick and easy source of improvement. Use coupon for free copy. Monsanto Chemical Company, Plastics Division, Springfield 2, Mass.

Monsanto is a major supplier of Opalon® vinyl resins and Monsanto Plasticizers, on which are based many of the fine vinyl plastisols available from qualified formulators.

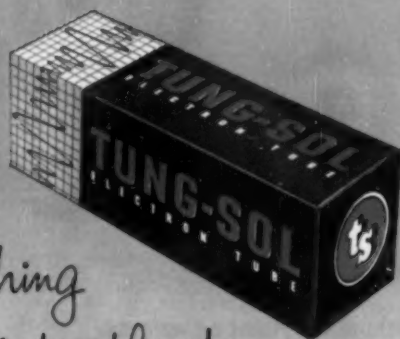


Monsanto Chemical Company
Plastics Division, Room 1476, Springfield 2, Mass.

Please send me free copy of
"The Vinyl Plastisol Story."

Name _____ Title _____
Company _____
Address _____
City _____ Zone _____ State _____

*Something
goes into this box
besides an electron tube...*



FEDERAL

**PAPER BOARD
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**NATIONAL
FOLDING BOX
DIVISION**

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SALES OFFICES: NEW YORK, N. Y.; CHICAGO, ILL.; NEW HAVEN AND VERSAILLES, CONN.; BOGOTA, N. J.; BOSTON AND PALMER, MASS.; CLEVELAND AND STEUBENVILLE, OHIO; PHILADELPHIA AND PITTSBURGH, PA.; MARION, IND.

FOLDING BOX PLANTS: BOGOTA, N. J.; NEW HAVEN AND VERSAILLES, CONN.; PALMER, MASS.; COLUMBUS AND STEUBENVILLE, OHIO; PITTSBURGH, PA.; MORRIS, ILL.; MARION, IND.; PAPER BOARD MILLS: BOGOTA, N. J.; NEW HAVEN, MONTVILLE AND VERSAILLES, CONN.; MORRIS, ILL.; READING, PA.; STEUBENVILLE, OHIO; WHITE HALL, MD.

has to have a building on hand, under lease or under construction. Sometime prior to September he has to buy signs (the ones shown on page 45 cost about \$1,700), tools, technical literature. He has to hire—and be paying salaries to—salesmen, mechanics, and office help. Doyle recommends that he immediately begin a used car business, which means he will have to buy some cars to get started. Sometime in August he will begin getting his Edsels, for which he has to pay on delivery.

What will all this cost? Doyle says that when a prospective dealer asks him that question he replies: "You're a business man. How much do you think you will need?" One man at Ford says the minimum dealer investment will be about \$80,000; in a big city it could range up to \$200,000. Krafve has said that the Edsel dealers facilities and working capital "will total \$100-million to \$150-million before the first Edsel is sold."

All this to try to sell a car with no record of acceptability.

• **More to Come**—Yet, Doyle expects to be pretty close to his goal of nearly 1,200 dealers on Introduction Day, although he says the most productive dealer recruitment period will be in the three months after introduction. As of this week, no Edsel selling agreements had been signed. Instead, Doyle has signatures on about 400 "pieces of paper." Although he won't describe these documents, Doyle says they are not selling agreements. They are more like options. Actual sales agreements won't be signed until July.

• **Shift Overs**—About 20% of the prospective Edsel dealers never have been in the auto business before and another 40% are Ford and Mercury dealers who are opening separate stores while continuing their present dealerships. Their faith in Ford Motor's new product perhaps is exceeded by another large group of dealers. These are competitive dealers who are switching their franchise to the Edsel.

A man holding a franchise for a competitive line has to give his factory as much as 90 days' termination notice. In the interim he is, in effect, going through a liquidation process and, lacking a new selling agreement, he technically has no assurance he has a future business. What does he tell his customers to whom he sells cars, during the termination period, about future service? Edsel suggests he tell them to continue bringing their cars to him; he will have the same mechanics, with the same training, as formerly. So, in one sense, the man switching franchises can start with a service plus—Edsel service customers and service customers of his former line. And, of course, his former customers may be future Edsel prospects. But meanwhile he is



GUARDIAN of your most valuable business asset

You step into Jim's office as he is concluding a conversation with a difficult customer. These thoughts cross your mind:

"Great guy, Jim. So much of our company's business depends on his tact, his talent, his instinct for handling sensitive matters. No doubt about it—his abilities, and those of a few other key people, are the most important asset we own. It would be a deep personal loss if anything happened to Jim—and an even greater loss to our firm."

Every business has its "Jim"—the key man who makes such a substantial contribution to the profits of the firm. That's why more and more firms are using GUARDIAN's Preferred Risk plans to protect their "human" assets.

In the event of Jim's untimely death, the GUARDIAN plan

would provide funds to help offset the resultant loss of earnings and tide the company over until a desirable replacement can be found. If Jim continues with the firm, the accumulated cash may be used to provide a retirement income for him, with definite tax advantages to the company.

The provisions of GUARDIAN's new 1957 policy contracts—the most modern in the insurance industry—are designed to give business firms an ideal solution to business insurance problems, with the most favorable tax consequences.

Your GUARDIAN representative or your own insurance broker will be glad to give you, your attorney and your accountant full facts and figures about GUARDIAN's Preferred Risk plans. Why not call him today.

The **GUARDIAN** Life Insurance Company **OF AMERICA**

A Mutual Company • Established 1860

50 UNION SQUARE, NEW YORK 3, N. Y.

You Can Expect Substantial Reductions in Waste Materials Handling Cost with ...

THE **DEMPSTER** SYSTEM



THE TEXAS COMPANY

This company uses our equipment to handle wastes in our Universal Containers (see photo), liquids in our Tank Type Containers and heavy materials in our Heavy Duty Containers at its Port Arthur, Texas, refinery.



BROWN COMPANY

This pulp, paper and other forest products manufacturer has 25 Dempster-Dumpster Containers of various sizes for "easier, cleaner handling of waste materials" at its Berlin, N. H., plants.



GENERAL ELECTRIC

At this large General Electric plant, the Dempster-Dumpster System collects scrap material in various areas, such as wire preparation and parts fabrication as well as waste material accumulated at this factory.

Above photos of the Dempster-Dumpster System at work also serve to show how each container is picked up, hauled and dumped. Here is, without question, the lowest cost method of materials handling by truck ever devised. Remember, there is a Dempster-Dumpster Detachable Container available or that can be built to suit the material — be it solid, liquid, dusty, combustible, high temperature . . . waste or salvageable, raw or finished product — each, regardless of size up to 21 cubic yards or payload capacity up to and over 36,000 pounds, can be handled by one truck-mounted Dempster-Dumpster with only one man, the driver. Write us today for complete literature. Manufactured by Dempster Brothers, Inc.



DEMPSTER BROTHERS, 467 Dempster Bldg., Knoxville, Tennessee

buying a pig-in-the-poke—deliberately folding a successful business (Edsel wouldn't take him if he hadn't been successful) on the strength of his faith in Ford Motor Co.

• **Sight Unseen**—Doyle tells of one competitive dealer who signed a "piece of paper." He was asked if he wanted to see the car he was going to sell before he signed. He shrugged and said, "It doesn't matter. I see a lot of Ford products running around the streets, so you people must know what you're doing."

Complicated though the incipient Edsel dealer's life is, Doyle and Krafve can match his problems. Product mix is one of them. The auto industry has bushels of statistics on how many four-door sedans, how many hardtops, how many station wagons and so on are sold in various markets. But those statistics have been developed from the sales of well-established cars. Will a car that has never been on the market adhere to industry trends?

• **Distribution**—Allied to that problem is the pattern of distribution. The Edsel will be built in seven plants—two also building Mercurys and four also building Fords. Somerville, Mass., will assemble only the two top series, the Corsair and Citation. On a map, the assembly facilities look right: There are plants for all four series on the East Coast, in the middle part of the country and on the West Coast. But the tastes of the customers decide where capacity is adequate as is illustrated by the sales of the Ford Div. Despite a new, high-capacity assembly plant on the West Coast, the division has had to ship cars from the Midwest for much of 1957.

Then there is the necessity for maintaining a pool of cars to serve dealers who are not signed by Introduction Day but come in shortly afterward. That may be as many as 20,000 cars.

But the dealer still has what may be the biggest single problem regarding the Edsel introduction period: price. With no previous experience to guide him, how will he determine what is a proper gross profit. The suggested retail price range of the Edsel has not been disclosed, but obviously it will have to be a spread of from around \$2,200 to \$3,600. In all other makes of cars the "suggested retail price" is the upper limit of the bargaining price. Generally, dealers discount slightly from the suggested list (or over-allow on trade-ins) right from the introduction day of new models.

Should Edsel dealers expect, because of the novelty value of the car, to get the full suggested price? Should they adopt the trading practices of competitive dealers? In an attempt to get volume how much dare they discount without giving a public impression the new car is not readily salable? **END**

Millions of feet in service ... proof of reliability!

FLUOROFLEX-T:
*Aviation's most
advanced hose*

The Original
fluorocarbon hose

Patented tube compound

Greater flex life

Millions of feet
in service

Over three years
flying time

Superior impulse life

Leakproof, blowoff-proof
fittings

Patented fireproof
construction

Self-supporting
pre-formed assemblies



FLUOROFLEX-T



Service-proved
constructions to 3000 psi



The greater flex-life of Fluoroflex-T hose assemblies is one of many reasons for their outstanding performance and reliability — *proved in over three years of tough, hard service.*

With many times the flex-life of other fluorocarbon hose, Fluoroflex-T assemblies continue to meet the severest requirements even after thousands of flying hours.

Only Fluoroflex-T assemblies provide this safety factor — the minimum insurance which the human lives and costly equipment involved deserve for their protection.

Now, with millions of feet in service,

the record speaks for itself. Fluoroflex-T hose assemblies truly insure optimum reliability for aircraft engines, frames and missiles.

VITAL FACTS ABOUT FLUOROFLEX-T

Fluoroflex-T hose is made of DuPont's Teflon — a raw material. The addition of compounding ingredients or the nature of fabricating techniques can vary properties in the end product considerably.

For example, *flex-life can vary a thousandfold* depending upon the manufacturing methods used and the degree of control applied.

Since the properties of products

from Teflon can be made to vary greatly, the fabricator's integrity and experience remain the user's best assurance of reliability and performance.

In Fluoroflex-T assemblies, it is the unique patented tube and special manufacturing techniques originated by Resistoflex that make the vital difference.

Resistoflex is the only "coupling manufacturer" that has worked with Teflon since its introduction. If you have any questions on the behaviour of hose made from Teflon, you can get the right answer from Resistoflex — conservatively expressed.

® Fluoroflex is a Resistoflex trademark. Teflon is a DuPont trademark.

Originators of high temperature fluorocarbon hose assemblies

Resistoflex

CORPORATION

Roseland, New Jersey • Western Plant: Burbank, Calif. • Southwestern Plant: Dallas, Tex.





Typical of the bright American dream of suburban living—a dream fast becoming happy reality for ever more millions of families—is this scene of a spacious suburban area near Atlanta, Ga.

THIS IS NATIONAL STEEL

Coast to coast, the chorus rings out: *"Suburbia, here we come!"*

Thanks to the mobility of modern motoring, a mass
migration to the suburbs is under way

For dramatic evidence of today's all-out trend toward suburban living—well, try this statistic for size: *There are now more passenger cars registered than there are households in the U.S. (52 million cars; approximately 48 million households).* And that means millions of families with two or more cars—with more millions certain to

join the ranks in the years ahead.

Seems just about everybody wants out (out of the city, that is!). And that's where the figures on car ownership come in—for it's today's superbly engineered automobiles that are making this mass migration possible.

How? By providing fast, dependable transportation for the bread-

winner who must commute to the city. And by providing his family with easy and convenient means of reaching schools, shopping centers, recreation areas—near or far.

"Suburbia, Here We Come!"

No wonder Americans, in ever-increasing millions, are united in one



Picturesque business centers (often regal in concept and complete with parking space for all) today make the finest in metropolitan shopping facilities available to the suburbanite right "at home." In fact, suburban living is revolutionizing marketing concepts.

mighty chorus of, "Suburbia, here we come!" And Suburbia, in turn, is making these millions warmly welcome with prodigious housing developments and single homes for every income bracket.

With scenic charms, too, and the many attractions of more leisurely living away from the congestion of cities—closer to the outdoor life. And with multi-million-dollar shopping centers within a few minutes' drive from every home for miles around—plus convenient off-street parking space. Suburban cash registers now ring up a lush multi-billion-dollar business volume yearly. It's a golden transfusion for our economy—an economy today being geared to new ways of marketing and changing buying habits under the impact of mushrooming Suburbia.

In these scientifically planned shopping areas that serve virtually every suburban community, the proudest names in big city merchandising now vie with one another to supply every possible want of suburbanites where they live. Many of these centers are splendid in concept—look more like dazzling resorts than bustling business concentrations.

Multi-Car Families Abound

Keeping pace with the increase in our suburban population (it's predicted that suburban dwellers will total more than 83 million by 1975), is the sharp rise in two-car families. With the round-the-clock business, shopping, social and other demands made on "the car" by every member of the family, a single automobile can prove painfully inadequate.

Also, the new 50-billion-dollar, 41,000-mile Federal Aid network of new multi-lane freeways—providing safer, handier access to cities, to industries, to pleasure travel, particularly for the suburbanite—should markedly stimulate multi-car ownership per family.



With golf courses, clubs, scenic drives within such easy driving distance for suburbanites—away from traffic-clogged city streets—out-of-doors pastimes take on a new dimension.

National's Role

We at National Steel take pride in the great contribution of the automobile to the health and well-being of our people and our nation. Because National Steel, through three of its major divisions—Great Lakes Steel at Detroit, Michigan, Weirton Steel at Weirton, West Virginia, and The Hanna Furnace Corporation at Buffalo, New York—is an important supplier of the steel and iron used by automobile manufacturers.

Through the skilled engineering and manufacturing of the automobile industry, this nation each year enjoys safer, stronger, more economical cars. Our constant goal—through research and cooperation with the automobile industry—is to make better and better steel for still greater safety, strength and economy in the cars and trucks of today and tomorrow.

NATIONAL STEEL

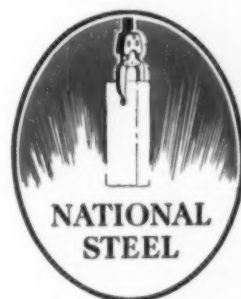
GRANT BUILDING



In Suburbia, two cars are almost a must: one for commuting, another available at home for shopping, pleasure driving, school, emergencies.



Swift and sure commutation by car from the breadwinner's city job to his suburban home means precious extra hours of relaxation and recreation.



**THIS IS
NATIONAL STEEL**

GREAT LAKES STEEL CORPORATION
WEIRTON STEEL COMPANY
STRAN-STEEL CORPORATION
THE HANNA FURNACE CORPORATION
HANNA IRON ORE COMPANY
NATIONAL MINES CORPORATION
NATIONAL STEEL PRODUCTS COMPANY

CORPORATION

PITTSBURGH, PA.



Photo courtesy Hydram Incorporated, Tampa, Fla.

Now—"Iron Mike" has met his master!

It's tough to make the starting team in the big leagues. But for a baseball, it's even tougher to qualify for batting practice. For here there's little letup in the pounding, the scuffing or the skinning. Particularly when "Iron Mike," the pitching machine, does the serving up.

A standout performer in this job—and in playgrounds, sand lots and batting ranges across the country—is an unusually durable ball with a molded-on, rubberized cord cover. This cover fully resists impact, abrasion and moisture, including repeated washing. As a result the ball retains its size, shape, weight and "grippability" much longer than its higher priced counterparts.

Much of the success of this ball lies in the use of three Goodyear materials in the cover compound. PLIOFLEX, the light-colored, oil-extended rubber, lowers both weight and cost without loss of desirable qualities. PLIOLITE S-6B—the high styrene, rubber reinforcing resin—adds toughness and a leatherlike feel. And WING-STAY S—a nonstaining antioxidant—protects the original whiteness and physical properties against age and sunlight.

Mastering "Iron Mike" is just one example of how properly compounded PLIOFLEX rubber can answer many product problems. If you would like more information on how PLIOFLEX or PLIOLITE S-6B or WING-STAY S can help your products, just write to:

Goodyear, Chemical Division, Dept. F-9415, Akron 16, Ohio.

Chemigum, Plioflex, Pliolite, Plio-Tuf, Pliovic, Wing-Stay—T.M.'s The Goodyear Tire & Rubber Company, Akron, Ohio



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CHEMIGUM • PLIOFLEX • PLIOLITE • PLIO-TUF • PLIOVIC • WING-CHEMICALS

High Polymer Resins, Rubbers, Latexes and Related Chemicals for the Process Industries

In Marketing

...

Federated Noses Out Allied In Department Store Sales

One of the nation's top retailing groups, Federated Department Stores, Inc., edged ahead of the long-time department store leader, Allied Department Stores Corp., on the basis of first-quarter sales. Last week Federated



sales were \$139-million, up from \$119-million for the same period last year. Allied reported sales of \$133-million for the quarter ended Apr. 30 this year.

At the same time, Federated announced top-level executive changes. Ralph Lazarus (picture), former executive vice-president, moves up to president. The former president, Fred Lazarus,

Jr., becomes board chairman and continues as chief executive officer. Lincoln Filene, 94-year-old retailing pioneer, was made honorary board chairman, and continues as chairman of Federated's Filene Div.

In taking the first-quarter lead away from Allied, Federated continued a steady growth rate that has seen it close in on its chief rival during the past few years. In 1955, for example, Allied rang up \$582-million in sales to Federated's \$538-million. Last year Allied sales rose to \$616-million, a \$34-million gain. But Federated jumped to \$601-million, for a gain of \$63-million.

...

One Big Boston Store Gives Up the Ghost, Another Surrenders Downtown Operation

In recent years several big New York stores have closed their doors—Namm-Loeser's downtown store, the downtown Wanamaker's, McCreery's. Now it is Boston's turn. Two veteran Boston stores—R. H. White Corp. department store and E. T. Slattery Co. specialty store—announced last week they had reached the end of the road.

For 90-year-old Slattery's, the close-down will be complete. It is locking up its two suburban stores as well as the downtown store. At White's, a member of City Stores Co., only the 104-year-old downtown store is giving up. The company is expanding its Worcester store and plans two suburban branches.

According to Albert M. Greenfield, chairman of White's and president of City Stores, White's lost \$1-million last year and several million in the past 10 years. Yet 10 years ago it was Boston's third biggest store.

White's had tried for months to salvage the downtown operation. It fought a losing battle against a poor location—farther from the transit stations than most retailers—and against high taxes, the bane of all Boston merchants.

City Stores, Greenfield explained, had been willing to put an additional \$2-million into White's and to make certain financial concessions if the money was matched by other means. But store employees turned down a 15% pay cut, and city fathers turned down a proposal to cut its \$4-million real estate assessment in half.

...

Mail Order Discount House Finds Trouble in Placing Triumphal Ads

Masters Mail Order Co., Washington (D. C.) discount house, and subsidiary of Masters, Inc., of New York, is having a hard time capitalizing on its recent court victory over General Electric Co. Masters Mail Order tried

to place ads of GE "fair-traded" merchandise at discount prices in three New York papers last week—and didn't make it. The ad was headlined, "The people of New York win a great victory in the battle against retail price fixing by manufacturers." It quoted discount prices, well below prices that "fair-trading" New York merchants were offering on the same goods.

HUGE SAVINGS on GENERAL ELECTRIC
masters FAIR TRADED APPLIANCES
Mail Order Co. of Washington

The People of New York Win A Great Victory in The Battle Against Retail Price Fixing By Manufacturers

IT'S OUR PURPOSE TO BE ABLE TO OFFER
37% OFF N.Y. FAIR TRADE PRICES
ON MAIL ORDERS TO WASHINGTON, D. C.

SAVE \$14.50 ON 25" 24" Transistor & Clock Radio	SAVE \$14.50 ON 40" 40" UPRIGHT CLEANER	SAVE \$12.50 ON 11" 7" STEAM & BOIL DRY
SAVE \$14.50 ON 14" 14" Tumble & Soften Washer	SAVE \$14.50 ON 14" 14" ELECTRIC FAN	SAVE \$14.50 ON 18" 18" ELECTRIC FAN

Now for Big Savings on GE Appliances for Trade-Ins! WE'LL GIVE YOU \$10.00 OFF! RETURN TO US YOUR OLD GE APPLIANCE

masters

The U.S. Court of Appeals in New York had upheld the mail order company's right to advertise and sell its goods by mail to customers in "fair-trade" states. The reason: Washington, D. C., has no resale price maintenance law.

Following the ruling, Masters Mail Order placed orders for ad insertions in the New York Herald Tribune, the New York News, and the New York Post. According to a Masters spokesman, the News and the Post got the insertion two weeks before it was scheduled, the Herald Tribune got it the day before.

Then, the day before the ad was to run, says the spokesman, the three papers notified Masters that they were not publishing the ads. Steve Masters, president of the mail order company and of Masters, Inc., wrote the publishers a stiff letter demanding an explanation. The spokesman says Masters "has referred the whole matter to its lawyers." This week WRCA also turned the ad down.

Neither General Electric Co.—which is appealing the court's ruling—nor the papers had any comment.

Meanwhile, the Washington concern is readying a huge mail campaign, enclosing the ad that was meant for the papers. Masters is entitling the ad, "The ad the New York newspapers didn't dare run."



SPECIALIST Walter Frank, right, answers a broker's request for a quote. At left, competing specialist Walter Travers.

Indispensable Man of Big Board

Without the specialist, trading in many a stock would be spotty and disorderly. It's a nerve-racking job for 350 men.

THESE PICTURES all include a man who—as a type—is indispensable to the smooth functioning of the New York Stock Exchange. The man is Walter N. Frank, a partner in Marcus & Co. He is a specialist—one of 350 such men on the floor of the exchange. Without these specialists, trading in many of the Big Board's 1,500 or so stocks would be spotty and uncertain, perhaps chaotic.

Specialists don't deal with the investing public but with other members of the exchange. But half the volume of shares traded daily goes through their hands, and their operations affect the rest, too. It's their job, assigned by the governors of the exchange, to maintain a continuous and orderly market in the stocks in which they specialize.

• **Making a Market**—There is at least one specialist for every listed stock, and two for 263 of the more active issues. Some specialists serve only one stock, but the average is 13 or 14 stocks, and

one firm has 54. Frank and his five partners in Marcus & Co. specialize in 17 stocks, including Bethlehem Steel, American Cyanamid, American Gas & Electric, American Radiator & Standard Sanitary, and Crown Cork & Seal.

When trading in his specialty stocks is active, the specialist merely stands ready to move in if he's needed. But someone may come along with stock to sell when there are no acceptable bids for it, or with an order to buy when no shares are being offered at acceptable prices. In such cases, the specialist must provide the missing factor in the market—he buys or sells for his own account. And he must stand always ready to throw his own buying or selling power into the market to keep prices stable and to preserve a narrow margin between bid and asked prices.

He earns his living from (1) the share of the brokerage commission that he gets from executing orders for other brokers and (2) his own trading operations over the long haul.

• **Broker Function**—The specialist serves as a broker by executing orders that are left with him by other members of the exchange when the order price is out of line with the current market and they haven't been able to trade between themselves.

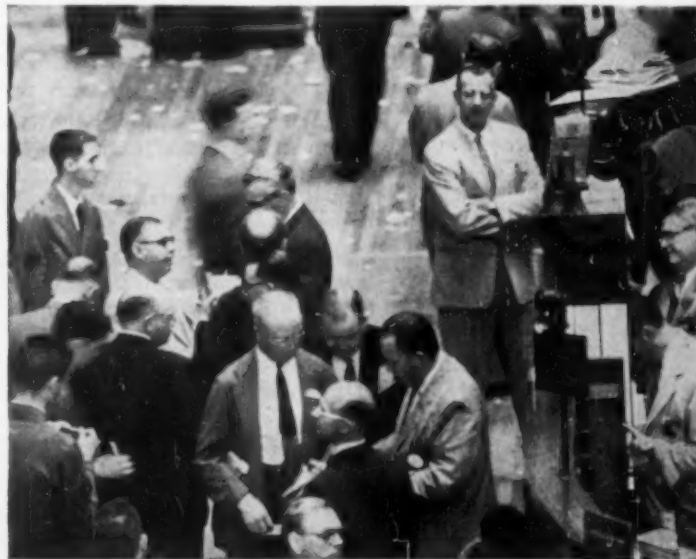
For example, a broker may have an order to buy 100 shares of U.S. Steel at \$65 a share. But the stock may be selling at \$69. The broker can't afford to hang around the post where Steel is traded until he finds someone who's willing to sell at \$65, but the specialist in Steel is there all the time. He agrees to take the responsibility of watching this order and executing it at the first opportunity. For this service, the specialist collects about 10% of the commission the other broker gets from his customer.

Meanwhile, the original broker benefits by being able to go on to any of the other 18 posts on the floor to execute orders for other customers.

• **Dealer Function**—By trading for his own account when the market is out of balance, the specialist tries to keep a narrow margin between bids and offers, so brokers can normally execute their orders at or near current market price. He tries to keep the price from one sale to another within a range of \$1 for stocks selling under \$20 a share or \$2 for higher-priced issues.

His own dealings are aimed toward bringing buyer and seller together, toward preventing a standoff that would impair activity in his stocks.

For example, the moment may



POST 10 is the horseshoe-shaped station at which specialist Frank (center foreground) spends every session.

COIN TOSS decides who gets deal when precedence of order is undeterminable.

the difference in Property Insurance is People!



The Adjuster—

makes you glad you're insured by THE HOME!

Policies may seem "all alike" to you—until you've had a fire or other insured loss.

That's when you appreciate the services of your Home Insurance adjuster.

When your own agent or broker recommends The Home to protect you, he has the adjuster in mind. He knows that The Home adjuster's objective is identical with your own—to see that your loss is paid promptly and fairly, with the least trouble and inconvenience to you.

To assure this, even after a catastrophe, The Home Insurance Company has trained and maintains a special staff ready to work 24 hours a day anywhere in the nation to speed payment to our policyholders.

As in most things—you do best when you buy the best! See your HOMETOWN agent now!

THE HOME

ORGANIZED 1853



Insurance Company

Home Office: 59 Maiden Lane, New York 8, N. Y.
FIRE • AUTOMOBILE • MARINE

The Home Indemnity Company, an affiliate, writes
Casualty Insurance, Fidelity and Surety Bonds

A stock company represented by over 40,000 independent local agents and brokers

come when the best offer to sell Steel is at \$70 and the closest bid is \$68.50. With that much spread between bid and offered, trading may stop entirely. In his role as a market maintainer, the specialist then may bid \$69 or he may offer to sell at \$69.50, depending on what he thinks the market needs. These intermediate bids or offers narrow the gap and start trading moving.

I. In Emergency

Specialists are rarely noticed by the investing public, almost never by the public at large. As with a good fight referee or baseball umpire, the more unobtrusively he functions, the better he's doing his job. He draws public attention only when there's an extraordinary event in the market.

On Monday of last week, for example, after the President's stomach upset, Big Board specialists steeled themselves for a recurrence of heavy selling that followed announcement of Eisenhower's previous illnesses: the heart attack, when trading volume went to 7.7-million shares the next business day, and the ileitis attack, which sent volume to 3.6-million.

Last week's Monday volume topped 3-million shares and, as the specialists had expected, started with heavy selling. But a quick rally erased much of the early loss. There's no way to tell exactly how much of the day's volume passed through the hands of the specialists. However, according to Willard K. Vanderbeck, the exchange's vice-president for floor procedure, the specialists last year bought or sold 13.6% of all shares traded, and handled another 35% or more in their role as brokers.

• **Under Pressure**—In trading for his own account, to fulfill his "maintenance of markets" function, the specialist often stands to gain or lose a large sum of money in a hurry. If there is a sharp rise or fall in the stocks he services, he tries to soften the trend.

Thus, either a sharp rise or a sharp drop in prices can run up a paper loss for the specialist, though his ability to play for the long run usually restores balance.

For example, the market hears good news about one of his stocks, and heavy buying pressure develops. To fill demand—and to keep the price from bouncing artificially high because of shortage of shares in a thin market—the specialist may have to sell short. It can happen then that he must cover his short sales by buying later at higher prices; on the other hand, he may be able to cover at a saving when profit-taking follows the sharp rise, as it often does.

• **On the Downswing**—The specialist's job on a panicky day can be still more ulcer-making. Take the first business



See how much structural steel was saved with curtain wall panels at Gateway Center

When the Gateway Center buildings were erected in Pittsburgh in 1950, the architects decided to use Stainless Steel curtain walls instead of masonry construction. The curtain wall panels had a Stainless Steel exterior and a lightweight concrete backing.

There are three buildings in the plan (one 24-story, two 20-story). If masonry construction had been used, 27.7 million pounds of structural steel would have been required. Since the curtain walls are so much lighter than masonry, only 23.5 million pounds of structural steel were required. The net saving in

structural steel was 2,077 tons, represented by that mass of 30-foot beams in the picture. At today's prices, this would represent a saving of approximately \$225,000.

But—that's not all. The thin curtain wall panels provided more rental area—25,280 square feet of it, which, at \$5.00 per sq. ft., would yield an additional \$126,400 rent every year. Since panels go up so quickly, tenants can move in earlier, and additional rental income is possible by reason of the early occupancy.

Curtain wall savings like this are being repeated all over the country today. If you'd like the complete

story, send this coupon for your free copy of "Walls of Steel," a descriptive, informative book of curtain wall construction.

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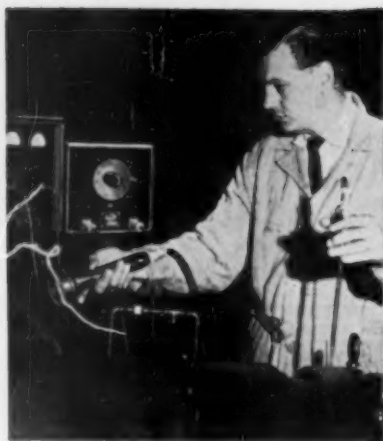
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A 450 HP motor was balanced, in place, at savings of \$8000 to \$10,000 in production and maintenance costs.

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day after the President's heart attack. According to a special Big Board study, the specialists' total investment increased \$23.5-million that day, to a new total of \$73.4-million. Everyone wanted to sell in that session, and few were buying—except the specialist, in the line of duty.

If the decline of the market had continued at its original rate, the specialists might have lost as much as 25% of their \$73.4-million investment before they could ease out from under. Fortunately, it didn't. But the hazard was further proof that the job of the specialist isn't for the nervous, the fainthearted, or the indecisive.

Not in the memory of the oldest Big Board employee has a specialist ever gone broke, despite the risks these men must take. There have been cases, though, when they've had to give up handling a stock because they couldn't stand the gaff.

Only this spring, the four Lukens Steel specialists, exhausted by a period of extremely heavy trading in a thin market, turned the stock over to a fresh seven-man team (BW-May 4 '57, p.40).

II. Making a Specialist

The origin of the specialist isn't clear. Legend has it that, around 1875, a floor member named Boyd broke his leg. Rather than convalesce at home, he came to work and conducted his business from a chair. Since he couldn't move readily around the floor, he chose one post and confined his trading to Western Union, a very popular stock. He did so much business that, even after he was able to walk again, he continued to specialize in Western Union.

Other brokers found this arrangement convenient, too. It assured them of a market in Western Union without delay or shopping around. Other men became specialists in other stocks, and the job became indispensable.

• **Requirements**—Today, an exchange member can't just decide he wants to be a specialist and start doing business. He must be approved by the Big Board's 33-man Board of Governors, of whom at least 10 spend most of their time on the trading floor.

The governors won't O.K. a man who isn't experienced in the specialist's operations or who hasn't at least enough capital to hold 400 shares of the stock in which he wants to specialize (or 100 shares of the 225 issues, mostly at Post 30, that are traded in 10-share lots).

A few applicants may have gained experience as specialists on another major exchange, but most of them begin as a specialist's clerk. At first, a man usually is named an associate specialist, which means he can do the

work only under supervision of the regular specialist.

Walter Frank started, like the majority, as a specialists' clerk. Although the clerk doesn't participate in the auction, he must know as much about what's going on as his boss does. Frank began as clerk for Mortimer Marcus, now senior partner of Marcus & Co. and then with a specialist firm on the old Curb Exchange (American Stock Exchange). When Marcus joined the New York Stock Exchange in 1932, Frank came with him; in 1937, he became a member of the exchange, a partner in the new Marcus & Co., and a specialist in his own right.

• **Measuring Up**—Once a member becomes a specialist, he faces the challenge of staying one. He is watched closely on how often he trades against the market (buying for his own account when the market is falling, selling when it is rising) and on the proportion of his trades for his own account, compared with total volume in his stock. A topnotch specialist will be trading against the market in about 80% of the operations that he undertakes for his own account.

If a specialist does a poor job, the first result is a falling-off in his business. Brokers will deal instead with a competing specialist; if there is no competing specialist, one may be appointed. The second thing that will happen is that the exchange will take the stock away from him and give it to another specialist.

This rarely happens, says Vice-Pres. Vanderbeck of the exchange, and in most cases, "the fellow tried his best but just couldn't measure up."

III. How He Operates

Most times on the exchange floor, there are 2,000 men milling around. Yet it's easy to spot the specialists. They're the ones who stay put at a post, the center of a crowd of brokers, with their hard-covered 4 by 11 in. "books" jammed against their chests. A specialist lives with and by his book, which contains the log of his transactions in a given stock in behalf of other brokers and a record of all unexecuted orders that have been left with him.

• **What's Bessie?**—Specialist Walter Frank stands outside the rim of Post 10, where his firm's 17 stocks and 50 or more others are traded. Overhead, the stocks at the post are listed, each with a dial that indicates the price of the last sale and whether it was higher or lower than the previous sale.

Every so often a broker approaches Frank. "What's Bessie?" he may ask. This is a request for the best bid and offered prices on Bethlehem Steel. Frank or his clerk will answer, as they



“By 1959, we shall be making, in North America alone, 1,000,000 tons of newsprint a year—moreover, we expect to sell it!”

SIR ERIC VANSITTART BOWATER
Chairman, The Bowater Paper Corporation Limited

Welcoming some 2,400 shareholders (including those from the United States and Canada) to the Annual Meeting on May 30 of The Bowater Paper Corporation Ltd. at Northfleet, England, Sir Eric Vansittart Bowater, Chairman of the Corporation, reported:

“1956 was a satisfactory and gratifying year for Bowaters. Overall production and earnings were at the highest level in our history.”

Substantial Overseas Earnings

“Consolidated revenues before depreciation and taxation amounted to just over \$44,800,000, of which more than 70 per cent was earned by our main overseas companies, compared with 65 per cent in 1955 and 55 per cent in 1954.

“A final dividend has been recommended on the Corporation's common shares at the rate of 8 per cent which, together with the interim dividend paid in October 1956, will make a total distribution for 1956 of 12½ per cent. This compares with 11¼ per cent for the previous year.”

Growth of Fixed Assets

“Fixed assets have increased by some \$98,000,000 to \$327,600,000. About one-half of this increase represents the properties and plant of the Mersey Nova Scotia Company, while the remainder reflects the progress of the capital development programs both in the United Kingdom and in the United States.

“The amount expended during 1956 on fixed assets and on trade investments totalled some \$109,200,000. To help meet this expenditure, new capital of \$75,600,000 was raised in North America in the form of notes and/or bonds by Bowaters Southern Paper Corporation and Mersey Paper Company, and in preferred shares by the latter company and by the Bowater Corporation of North America. The balance was provided internally. Consolidated assets, in the form of buildings, plant, timberlands, ships and other assets, now exceed \$420,000,000.”

Plans Take Shape

“Overseas we are expanding our paper conversion facilities in Australia, while in Canada the program for further speeding up and developing our mills at Corner Brook and at Mersey, Nova Scotia, makes steady progress. In the United States work has commenced on the fourth machine at the Tennessee mills, which is

scheduled to start up at the end of 1958. Work has also commenced on the new sulphate pulp mill at Catawba near Rock Hill in South Carolina. Its output will replace the pulp presently being manufactured and exported here by the Tennessee mills, for the third and fourth paper machines at those mills will absorb the whole of the pulp production presently available for export.

“Of prime importance was the acquisition of the Mersey Paper Company, one of the most efficient and well-managed newsprint mills in North America, the present capacity of which—and they are operating to that capacity—is 147,000 tons per year. This is to be raised over the next year or two to some 165,000 tons per year.”

Corner Brook Mills

“Operations of the North American Corporation's principal subsidiary, Bowater's Newfoundland Pulp and Paper Mills, have been limited by an exceptionally severe winter and by a serious fire. These misfortunes very adversely affected the Corner Brook Company's earnings for 1957 to date, but it is my hope that much of this leeway, if not all, may yet be made good during the remainder of the year.”

Increased Production in

North America

“Bowaters Southern Paper Corporation, Tennessee, enjoyed an outstandingly satisfactory year. With the third machine now in operation, the addition of the fourth machine will raise the annual productive capacity of our Tennessee mills to 435,000 tons of paper. By 1959 we shall be making in North America alone a million tons of newsprint a year—moreover, we expect to sell it; indeed it has already been sold under long-term contracts.

“The consolidated profits of the North American Corporation were \$28,400,000—a substantially higher level than previously because of the increased production of its subsidiary companies' mills and the inclusion, for a period of eight months, of the earnings of its new Mersey subsidiary company. These profits might have been still greater but for the continued upward trend in all manufacturing, selling and transportation costs of pulp and paper which more than offset the 1956 increase in prices for its subsidiaries' products.”

Facilities for U.S.A. Investors

“Arrangements have been made for the issue of American Depositary Receipts, which facilitate the transfer of the Bowater Common Stock held by shareholders in the United States. This did not permit our American shareholders to participate in our recent issue of Loan Stock because that issue was not registered with the Securities and Exchange Commission. While this matter is somewhat complicated by SEC regulations, it is my hope that ways and means may be found to enable us to offer to our American shareholders participation in any future offerings of our securities.”

No Apology for Newsprint Prices

“I do not believe there are any grounds for apology in regard to the price of newsprint in the United Kingdom or North America. Many of the causes of relatively high prices have in my view come to stay—for instance, the basic raw materials, particularly wages.

“A vigorous, expanding and financially healthy Press throughout the world is vital to our interests. So, also, an expanding and healthy newsprint industry is vital and indispensable to the present and future well-being of the Press of the world.

“For many years the Press has laid great emphasis on the need for an increased and increasing supply of newsprint to meet its growing needs, needs that in my belief will continue to grow. Supply and demand of this world commodity are now almost in balance as the result of the great expansion in production that has taken place during the last decade. In those ten years Bowaters has installed ten new high-speed paper machines in the United Kingdom and North America, capable of producing nearly a million tons of newsprint or other papers annually.

“Surely the newsprint industry deserves thanks rather than reproach for providing the foresight, finance, equipment and ability to raise the volume of production of newsprint, while keeping the rising curve of newsprint prices below that of other productive industries. After considerable capital cost, it should not be asked to further reduce its already slender profit margins.”

American Experts Analysis

“The American Newspaper Publishers Association recently has

had prepared a study by Dr. Charles W. Boyce which forecasts that newsprint consumption in the United States by 1965 will amount to over eight and a half million tons, and that of Canada to 575,000 tons, together representing an increase during 1960-1965 of over one million tons. (In 1956 U.S. consumption was just short of seven million tons.) Adding overseas requirements, the overall demand for newsprint from North America will by 1965 amount to 11,175,000 tons. According to this report, planned capacity of the North American newsprint industry will by 1960 amount only to some nine and three-quarter million tons per year compared to our own estimate of ten and a quarter million tons per year. Either is well short of forecasted consumption. This would seem to confirm our view that, while production and consumption will in the next year or two be in closer balance, existing and planned newsprint capacity would in the not distant future again fall short of meeting world needs.”

Profit Margins

“We anticipate that our mills will operate substantially to capacity during 1957 but, despite the slightly higher level of selling prices for some of our products, recently effected, ever-rising costs of production may still further reduce profit margins. Nevertheless, we anticipate this shrinkage should be offset to some extent—if not wholly—by a further overall increase in their production. I have no immediate reason to believe that 1957 results will be unsatisfactory.”

Confidence in the Future

“We have implicit confidence in the future of our industry and of your Corporation. True, in the United Kingdom, the fortunes of industry generally may continue to be influenced by the present inflationary pressure which will probably necessitate the Government continuing to exercise a strong measure of financial and economic control. Some people still persist in taking a gloomy view of Great Britain's future—I don't. I continue to pin my faith in the common sense of the people of our great country, and in their ability to resolve the problems and overcome the difficulties that confront them.”



Bowaters

United States of America

Great Britain
Republic of Ireland

Canada
Norway

Australia
Sweden

South Africa

Stockholders will automatically receive copies of the complete speech by Sir Eric Bowater, Chairman of the Corporation. Copies are also available to others who are interested on application to:

The Secretary-Treasurer,
The Bowater Corporation of North America Ltd.,
1980 Sherbrooke Street West, Montreal 25, Quebec



Sentinel in Navy Blue

*He goes down to the sea in ships,
does business in great waters.*

But no longer is the Navy confined to the sea's surface. It plumbs the depths, ranges through the skies, penetrates outer space. Its laboratories, even a thousand miles inland, are nautical battle stations.

Research by the Navy, and by the industries which serve it, anticipates tomorrow's needs. Among the industrial leaders contributing to

that research and translating Navy needs into production realities, are eight companies of the GPE Group.

Typical of the significant contributions by GPE companies are Librascope's computers and anti-submarine devices . . . GPL's automatic bombing and self-contained navigation system for the Martin Seamaster . . . Griscom-Russell distillation equipment on every class of ship including nuclear powered

craft. An indication of Askania's, Kearfott's and Link Aviation's involvement is given in the adjoining column.

Many GPE Group products serve vital defense needs today. The scientific advances they embody will one day benefit everyone.

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praenuntius futuri



"Portrait of The Future" is the well-chosen motto of this submarine. States U. S. Naval Institute Proceedings: "The *Albacore* will long be remembered as the pioneer design for flying under water." *Albacore's* revolutionary piloting technique was conceived and produced by Askania, a GPE company.



Link Aviation provides still another glimpse into the future with its F-11-F Flight Simulator in which pilots of the supersonic *Tiger* pre-experience flight conditions and maneuvers, "log" priceless familiarization time. Also "shipping out" with the Navy Air Arm is Kearfott, providing 400-cycle components for both planes and guided missiles.

The coordinated resources of the companies of the GPE Group, so effective in anticipating and meeting the needs of the Navy, serve with equal effectiveness other fields such as:

Automatic Controls and Instrumentation
Aviation
Chemical and Petroleum
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Motion Picture and Television
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Steel, Mining, Transportation



For brochure describing the work of The GPE Group, write to: GENERAL PRECISION EQUIPMENT CORPORATION, 92 Gold Street, New York 38, New York.

BUSINESS WEEK • June 22, 1957

did one noon last week: "48½, 49." This means the best bid to buy was at \$48.75 a share, the best offer to sell was \$49 a share.

If the broker has an order that fits in with these prices, he may trade immediately with Frank or one of the other brokers who are standing by with orders of their own. Otherwise, he will leave the order with Frank to execute if the market moves in line with his customer's stipulated price.

Occasionally, two or three brokers will make the same acceptable bid or offer, and it may not be possible to determine which came first. In such a case, the decision about who makes the deal rests literally on the toss of a coin (picture, page 67).

• **Thick of Things**—The specialist in a major stock rarely has a moment to relax. He's on his feet continuously, carrying on overlapping conversations with brokers, his clerk, maybe his partners or a competing specialist (Marcus & Co. competes with Travers & Bartsch in Bethlehem Steel, American Gas & Electric, and seven other stocks), flipping pages of his book and occasionally flipping a coin. Competing specialists don't have access to each other's books. But since both hear all the bids and offers in the crowd, each knows what the other is quoting.

On top of these visible signs of activity, the specialist must ceaselessly weigh market sentiment and judge what to do about keeping his special stocks moving. When the price spread in one of his issues gets too wide, he must make a bid or an offer on his own account in an attempt to narrow it. Then he has two fast decisions to make:

- Should he raise the bid price or lower the offered price—or both?
- In any case, by how much?

His reaction to these questions depends on something even more essential to him than his books—his "feel" of the market. If he feels that the trend is on the upside, he might go along with it by raising his bid; on the downside, by lowering his offer. Or if he feels that the pressure in either direction is getting too strong, he may go against the trend. In such a case he will offer to supply stock to a rising market at a price lower than the best offer in the crowd or to buy stock in a falling market at a higher price than the best bid.

"There's no set rule on how we decide on the intermediate price," says Frank. "We take into consideration the last sale, the trend of the market, the trend of the stock group, published views of the company, news affecting the stock, and then decide whether the market should move higher or lower."

• **Defense Mechanisms**—If there's steady, unrelenting pressure on either

side, the best he can hope to do is to slow the movement. Sometimes a piece of news affects trading in a stock so drastically that the specialist has to ask a floor governor to hold up the trading until he can tally up his book to see where he stands.

If buy orders, for example, far outweigh sell orders, he then tries to get brokers to cancel some of their bids while he tries to drum up more offers to sell. This in itself may bring the market into better balance, but in the end he may have to fill the demand himself out of inventory or by selling short.

• **Criticism**—Specialists are not exempt from criticism. Some people object that they are in a position to take advantage of their special knowledge of the market; others say they can't possibly eliminate conflict between their trading and brokerage activities.

However, the stock exchange (most exchanges in the U.S. have specialists) and the Securities & Exchange Commission watch the specialist closely. And—perhaps the greatest deterrent to any indiscretion by a specialist—so do the 500 or more members always on the floor at the Big Board.

FINANCE BRIEFS

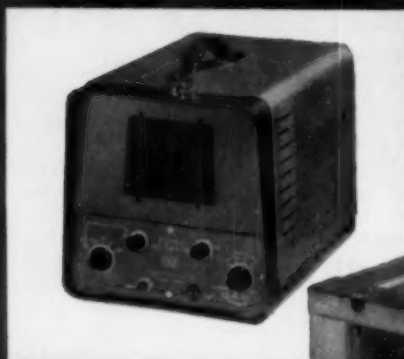
Dow Chemical and Dobeckmun Co. are talking merger, but Dow warns that while "we are talking merger . . . that doesn't mean we are negotiating."

Payoff for expansion: General Foods Corp. says \$345.4-million, or 35.6%, of its sales in the fiscal year ended Mar. 31 represented products introduced or acquired since World War II.

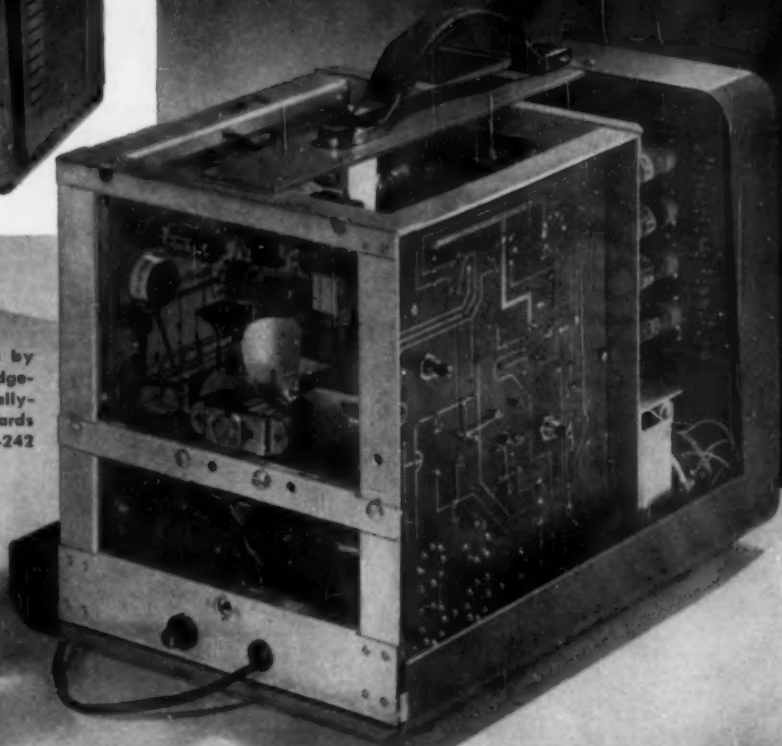
If Monsanto Chemical carries through its \$124-million capital spending plan this year, its year-end cash will be down to \$21-million, "a marginal amount with which to carry on our business," says Pres. E. M. Queeny. But he adds that "we do not believe it will be necessary to finance this year . . . unless our projections prove incorrect."

Financing costs for pipelines are way high. Last week Michigan-Wisconsin Pipe Line was tagged for a 6.185% net interest cost on \$30-million 20-year mortgage bonds. This week, Houston Texas Gas & Oil and Coastal Transmission Corp.—which plan to build jointly a \$150-million Texas-to-Florida natural gas pipeline—privately sold \$103-million long term mortgage bearing 5½% coupons.

Wyoming has finally made it as the 48th state to get New York Stock Exchange ticker service. The foothold is in Dain & Co.'s office in Casper.



Digital Multimeter made by Franklin Electronics, Inc., Bridgeport, Pa., uses three vertically-mounted, printed circuit boards made of Taylor Grade XXXP-242 copper-clad laminate.



Here's why you get better printed circuits with Taylor copper-clad laminates

Translucence, to allow easy checking of circuit alignments on opposite sides . . . high insulation resistance and surface resistivity after etching . . . cold punchability . . . high resistance to dip soldering temperatures . . . all are features of Taylor Grade XXXP-242 copper-clad laminate. This phenolic laminate, clad on both sides with rolled copper, was selected as the material for the three vertically-mounted, printed circuit boards for the Franklin Digital Multimeter . . . a portable measuring instrument.

You can use these same features to improve your own product. You can choose from several grades of Taylor copper-clads . . . as well as more than

50 grades of Taylor laminates combining paper, fabric or glass bases with phenolic, melamine, silicone or epoxy resins.

Each Taylor laminate has its own special qualities that may give your product the exact features you want. And these materials can make your fabrication and assembly easier . . . reduce your material costs.

For a new look at your product's requirements . . . for help on your fabricating problems . . . discussion of your fabrication needs . . . get in touch with Taylor.

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In Washington

• • •

Eisenhower Turns Down Murray, But Names Truman Men to AEC

Despite tremendous pressure to reappoint Thomas E. Murray as Atomic Energy Commissioner on the expiration of his term on June 30, Pres. Eisenhower has decided to replace him with a former Truman Administration official.

John F. Floberg, assistant Navy secretary for air from 1949 to 1953, was nominated this week to replace Murray. Floberg is an attorney who formerly practiced law in Chicago and now practices in Washington. He regards himself as an independent politically. He is 41.

Eisenhower also nominated another former Truman official, John S. Graham, 51, to fill the vacancy left by the death of the late John von Neumann. Graham held the post of assistant secretary of the Treasury from 1948 to 1953. He is a Democrat.

Democrats have been urging the retention of Murray, last Truman appointee remaining on the commission. They regard him as the sole obstacle to domination of AEC by Chmn. Lewis L. Strauss. Murray's clashes over policy with Strauss have been heated and frequent.

Present indications are that the principal criticism of the Eisenhower nominees will be their lack of knowledge of atomic energy matters. Democrats fear they won't know enough to oppose Strauss effectively.

• • •

ICC Safety Check of Big Trucks Finds Violations in 9 Out of 10

Nine out of every 10 big trucks on the highways today are operating with one or more safety defects. That is what the Interstate Commerce Commission found in a recent nationwide road check of over 11,000 vehicles that operate in interstate commerce.

Over 1,000 of the trucks inspected were hauled off of the road by the ICC inspectors and placed out of service for being "so imminently hazardous" that they might cause an accident or breakdown if allowed to continue on the roads.

The principal violation, the ICC reported, was in braking systems—of the trucks inspected, over 6,000 had brake defects. Admittedly, some of the defects were minor, but still in violation of ICC safety regulations.

• • •

Waterway Users Fight Economy Drive By Boosting Rivers as Industry Lure

Inland waterway users are making an all-out effort to convince economy-minded congressmen that money voted for rivers and harbors is well spent.

Latest figures they present indicate record construction of plants along waterways, as big chemical, petroleum, and metal companies expand to take advantage of the relatively cheap water transportation. On the Tennessee River, alone, 160 new plants were built last year and 49 expanded, at a cost of over \$300-million.

This year's first quarter produced 128 plans for building new plants on sites acquired along river and canal banks. Over the last three years, 1,400 plants costing \$2-million or more apiece have been completed on waterways, says American Waterways Operators, Inc.

• • •

New Senate Broadside Against Oil Brings in GM-du Pont Decision

The oil industry, long a favorite target for Congressional investigators, is wearing some new battle scars.

A Senate antitrust subcommittee publicized findings by its staff that (1) operations of U.S. oil companies in the Middle East have the earmarks of a cartel, and (2) control of transportation facilities in this country gives the major companies effective control over independent producers and refiners.

These harsh indictments came out in an unusual proceeding. The subcommittee's staff members testified on their own conclusions, reached as a result of the subcommittee's study of last winter's emergency oil-for-Europe program and the accompanying price increases.

The staff report reflects the opinions of Acting Chmn. Joseph C. O'Mahoney (D-Wyo.). But it is doubtful that other subcommittee members will ever approve the document.

O'Mahoney, meanwhile, is understood to have forwarded the transcript to the federal grand jury in Alexandria, Va. This body is studying whether oil company pricing policies may be in violation of the antitrust laws.

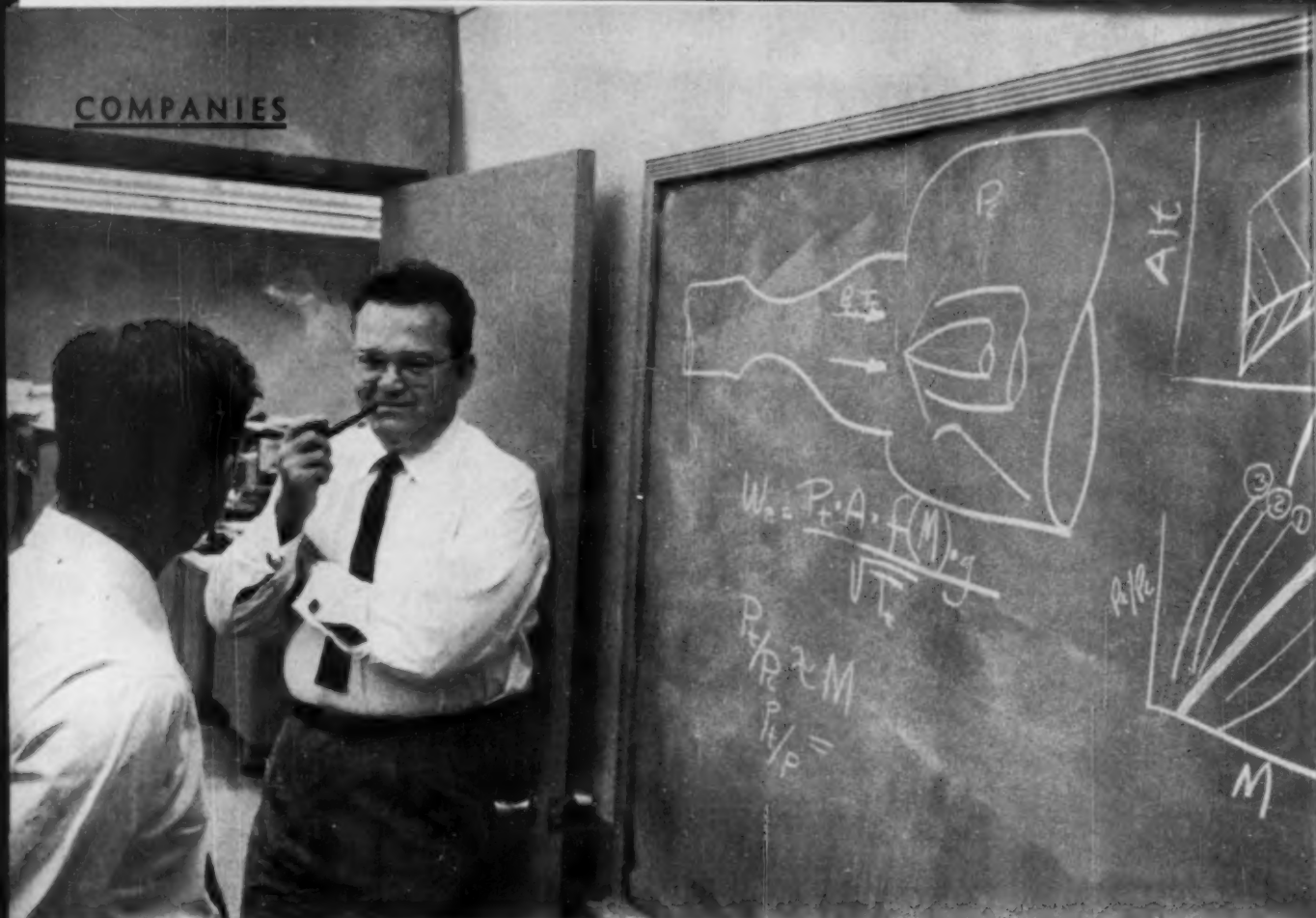
The recent Supreme Court decision in the General Motors-du Pont case (BW—Jun.8'57,p41) got into the picture, too. Among its other recommendations, the subcommittee staff proposed that the Justice Dept. consider whether oil company control of petroleum pipelines should be challenged under the decision.

• • •

Senate Group Wants to Know Why Cordiner Proposals Got No Action

A five-man Senate Armed Services subcommittee, headed by Sen. John Stennis (D-Miss.), has been set up to study the Cordiner report on military personnel (BW—Mar.9'57,p30), and to find out why the Administration has failed to carry out its proposals. The Cordiner committee, under Ralph J. Cordiner, General Electric president, made detailed recommendations—notably for pay boosts—to encourage recruitment and reenlistment of military technicians.

Because of the high costs involved, the Administration has up to now put the damper on Pentagon attempts to carry out the proposals. But wide-scale politicking by military partisans is keeping the issue alive.



YOUNGEST chief executive in aircraft engine business, Roy Marquardt (right) mingles informally with engineers on his staff.



TESTING of ramjet engine in test cell simulating high altitude gets close personal attention from Marquardt, who nursed ramjet to present importance, is called "Mr. Ramjet."

COMPLEXITIES of control panel for test cell are no mystery to Marquardt (second from right). He is graduate aeronautical engineer.



Company With a One-Track Mind

Starting from scratch, Marquardt Aircraft Co. grew to prosperity concentrating on one idea—the ramjet engine.

IS SMALL ENTERPRISE obsolete in today's jet and nuclear age? With the demand all for infinitely complex and expensive lines of hardware, the premium often seems to be on bigness. But there's at least one argument that smallness can pay—the case of Marquardt Aircraft Co. of Van Nuys, Calif.

Marquardt started in 1944 with \$1,000 and an idea. Today, the idea has flowered into a ramjet engine important in the U.S. missile program. This month, the new Marquardt plant in Ogden, Utah, will begin turning out ramjets in production quantities. The company's net worth is \$5-million. Sales this year are expected to reach \$41-million, and the order backlog alone totals \$60-million. From a handful at the start, the payroll has grown to 3,200.

Through all this, the company has clung single-mindedly to one idea—the ramjet—under one man, Roy E. Marquardt.

I. The One Idea

Marquardt's ramjet engines—nicknamed the "flying stovepipes"—are the fastest, highest-flying air-breathing engines known to man. They will be the power plant for the lightning-fast Boe-

ing Bomarc, an anti-aircraft interceptor missile now in production. According to *Aviation Week*, a McGraw-Hill publication, the ramjet will give the Bomarc a speed of 2,500 mph. at altitudes up to 60,000 ft. and over a 200-mi. range. Although the Bomarc's two engines weigh only 500 lb. each, they can deliver up to 50,000 hp. And the ramjet, with no moving parts, is relatively cheap to produce.

• **Defining Terms**—The ramjet's name comes from the characteristic that distinguishes it from other air-breathing engines. In all air-breathing engines, to be sure, air is compressed, mixed with fuel, and burned to produce propulsion. But there's a difference:

- In reciprocating engines, a piston compresses the air.

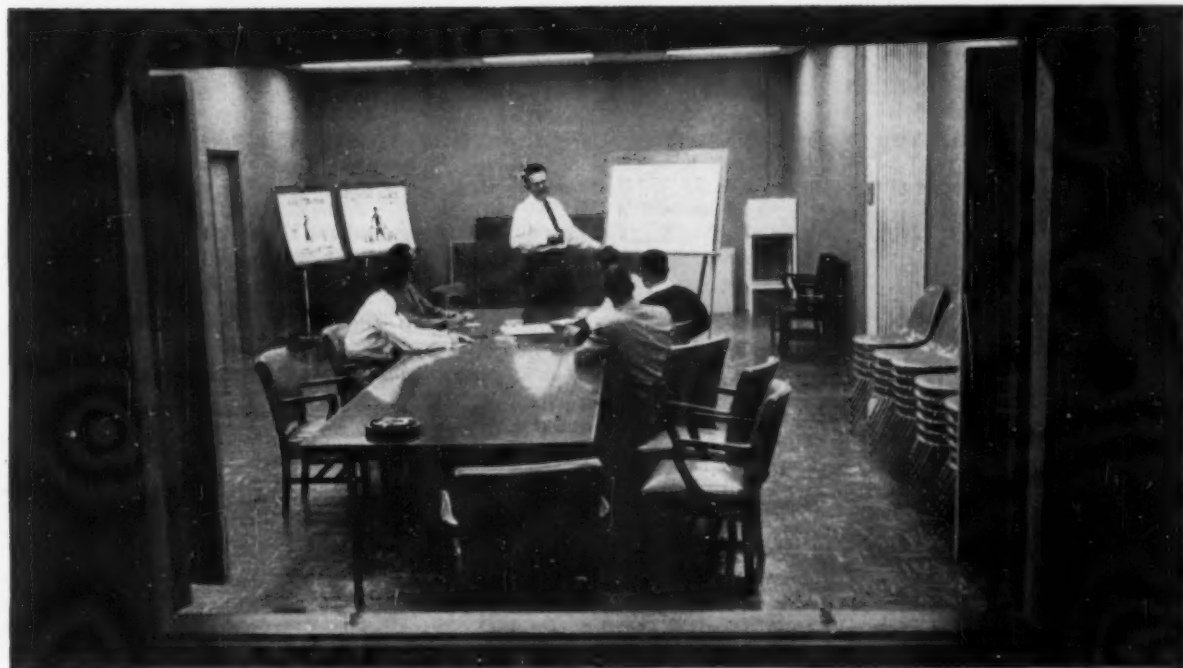
- In a turbojet, a rotary compressor does the job.

- In the ramjet, compression is obtained simply by ramming the whole engine through the air at high speeds.

Because the ramjet uses the vehicle's own motion for compression, it is not self-starting. Some sort of booster—a rocket, for example—must bring it up to starting speed (generally, half the operating speed). Of course, on missiles carried by airplanes, the plane's



RESEARCH and long-range planning occupy two-thirds of Marquardt's time. He delegates most of operating responsibilities.



NEW PROJECT for Marquardt Aircraft is outlined by the president. So far, company has been too busy on ramjet to diversify much.

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"... although the ramjet idea wasn't new, Marquardt's perseverance and faith in it were . . ."

MARQUARDT starts on p. 76

flying speed is enough to get the ramjets going.

The ramjet is so simple because it has no movable compressor. In the range from 1,200 to 2,400 mph. it is considered superior to any other air-breathing power plant in performance—with low fuel consumption per horsepower developed, a high ratio of thrust to weight, and low initial per-horsepower cost. At the moment, its most important application is for interceptor missiles of longer range, but it's also suitable for air-to-ground missiles toted by planes. Dudley C. Sharp, Assistant Air Force Secretary for Materiel, even thinks the ramjet will be practical at speeds up to 6,000 mph.

• **Stovepipe's Father**—Roy Marquardt, 39-year-old president of Marquardt Aircraft, didn't invent the flying stovepipe. That distinction is probably held by a French engineer named Lorin, who published the first recorded article on the ramjet in 1913. But Marquardt nursed it into its present importance.

His work with ramjets began during World War II, when he was in charge of Navy research for Northrop Aircraft, Inc. At the time, jet propulsion was a mystery to most scientists. The British had flown their first plane with a turbojet engine, developed by Whittle, in 1941; it developed ultimately into the Rolls-Royce jet engines and General Electric's first U.S. models. And Britain's Meteor jet fighter was in service by 1944 to fight the V-1 buzz bombs. But the Germans, after flying a jet plane in 1939, sacrificed jet engine development to buzz bombs. And although a British jet engine was installed in a U.S. fighter sometime before the war's end, few U.S. aeronautical engineers knew it.

At Northrop, Marquardt was trying to find a way to cool aircraft engines so that they could be mounted within the wings. This would reduce drag, increase speed and range. In the process, he rediscovered the ramjet principle. He found that there was energy galore in the engine-warmed cooling air. Properly handled, this could be used to augment the thrust of the prime power plant. Furthermore, a tremendous thrust would result from burning additional fuel with this engine-warmed air.

• **Corporate Beginnings**—Although the ramjet idea wasn't new, Marquardt's perseverance and faith in it were. In 1944, he became director of aeronautical research at the University of Southern California, where he continued ramjet studies. That same year, the Navy Bureau of Aeronautics gave USC a con-

tract to develop a subsonic ramjet engine, 20 in. in diameter, according to Marquardt specifications. Since USC had no manufacturing facilities, the Marquardt Aircraft Co. was incorporated to construct the engine on a sub-contract. The company's \$1,000 in initial capital came from Marquardt himself, and nine associates.

II. Growing Up

Marquardt Aircraft's first factory was a stall in what was then a farmers' market on Los Angeles' Third Street. Workers formed parts for the first engines by beating them over the concrete curbing outside.

In 1946, Marquardt moved to a small plant in Venice, Calif., where it continued in similar makeshift fashion without adequate operating capital or test facilities. Equipment to supply the mighty air pressures needed to test ramjets costs in the millions—and Marquardt didn't have millions. The problem was finally solved by using the air supply from blast furnace blowers at Kaiser's steel mill in Fontana, Calif. The first test lab was on the roof of the Kaiser powerhouse.

In 1948, when the company moved to the former Timm Aircraft Co. plant in Van Nuys, the new home's 101,000 sq. ft. yawned so vast that employees played volleyball and badminton in the middle.

By this time, the company had backing from the Air Force, which wanted the ramjet to power a long-range supersonic missile. So it began construction of a multimillion-dollar test laboratory.

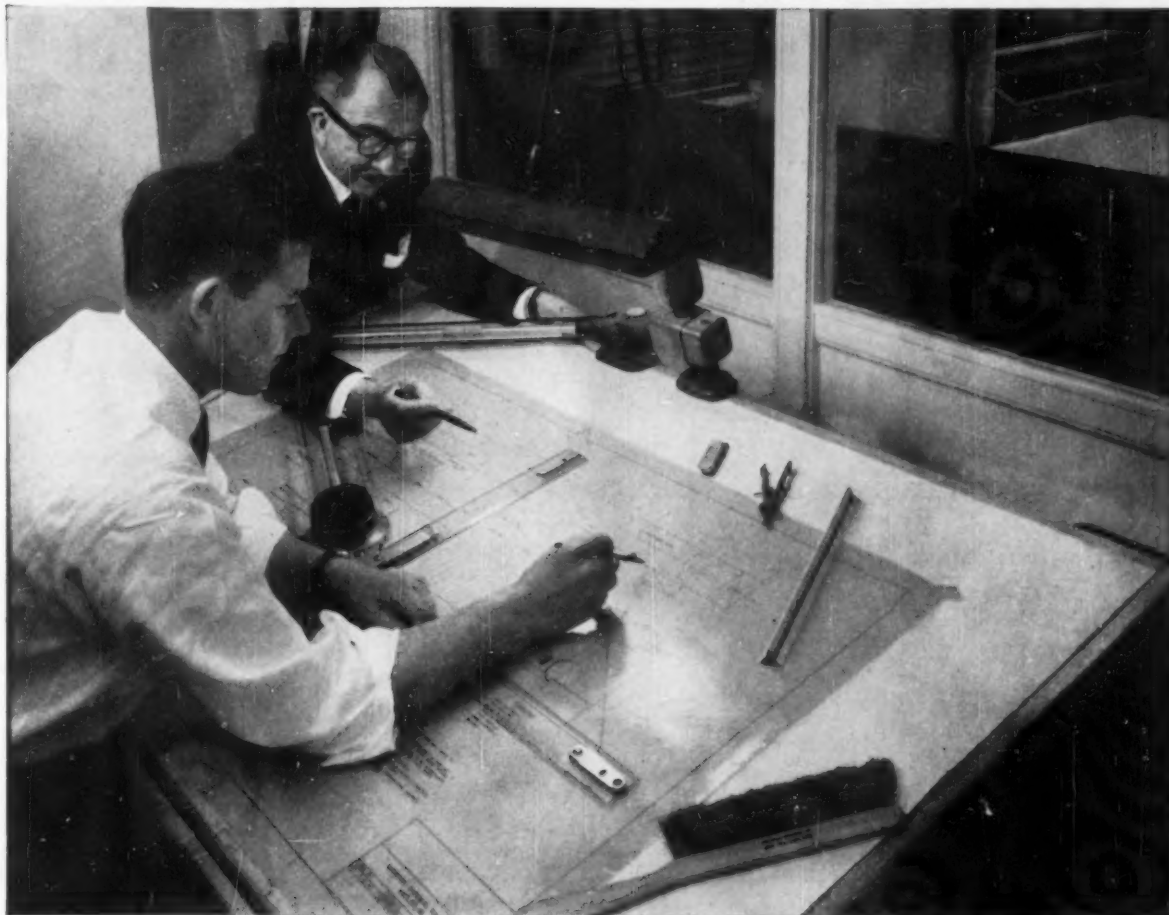
• **Cash Wanted**—At this point, the need for capital was really obvious. So far, financing had come from the private sale of 17,000 shares of common stock at \$1 per share. But more was essential. The first big bankroller was the General Tire & Rubber Co., which bought 50% of Roy Marquardt's stock and all the shares owned by others to gain 75% control, increased later to 85%, at a price of \$9 per share.

This liaison lasted until 1950. Partly because of friction between Marquardt and General Tire over policy, the rubber company sold its interests—for a reported 25% profit—to Laurance S. Rockefeller, enthusiastic financier of many aviation ventures.

Rockefeller and associates gave Marquardt a \$250,000 cash transfusion, and a line of credit was arranged with Chase National Bank for \$300,000, upped in 1951 to \$750,000.

• **On the Market**—The first public issue

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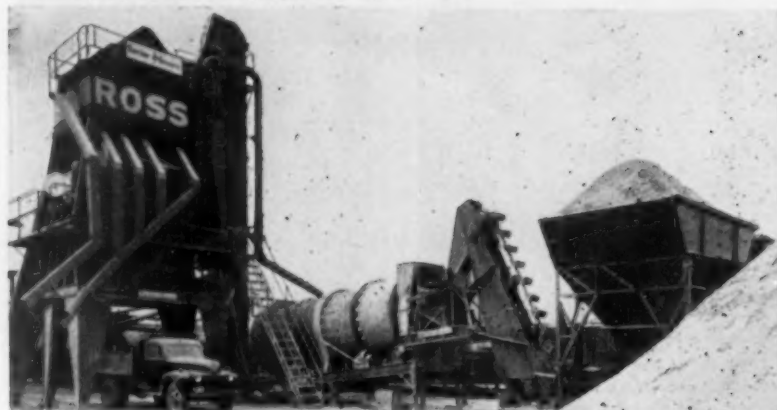
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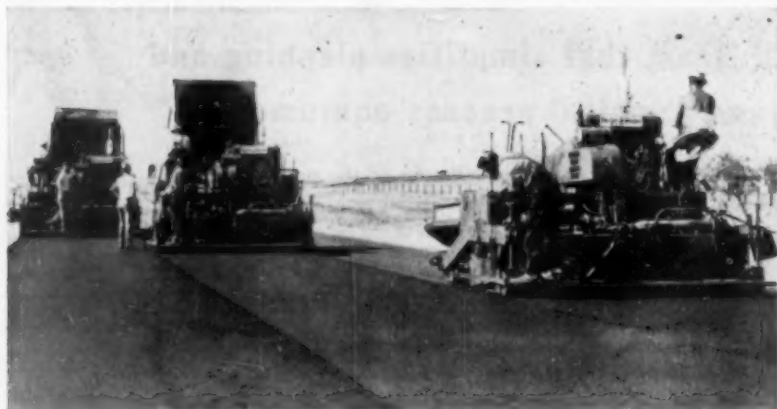
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of Marquardt Aircraft stock—20,000 shares at \$13.50—appeared in 1952. The preferred shares were retired, and \$200,000 worth of 3% convertible notes were turned into 25,000 shares of common stock. In the same year, the Reconstruction Finance Corp. agreed to lend \$765,000 so that Marquardt could buy the Van Nuys plant from General Tire and add improvements. The company paid a 10% stock dividend in 1954 and split the stock 2-for-1 in 1955. It has not yet paid a cash dividend; it has, however, earned money each year for the past 10.

Last year, with sales more than doubling (from 1955's \$11-million to \$23-million), the financing program was proportionately ambitious:

- The line of credit with Chase (by then Chase Manhattan) was increased to \$1.2-million.

- The company issued, through a rights offering, 42,442 additional shares of stock at \$36 each and \$2-million worth of 5 1/2%, 10-year mortgage bonds.

- It arranged a Regulation V loan through Chase Manhattan and two Ogden banks, allowing it to draw \$8-million by June 30, 1958.

- In a private placement of capital stock, 16,500 shares went at a \$40 price, and employees took 500 more.

In the meantime, the ownership structure had become more balanced, largely through Rockefeller's sale of 25% of his holdings to Olin Mathieson Chemical Corp. in 1954. Today, it splits up this way: Olin Mathieson, 25.8%; Rockefeller, 19.7%, and company officers and directors, 11.8%.

III. Into Production

Financing is one thing, production another. By 1955, Marquardt was satisfied with ramjet development, and sales were booming. But even last year, 90% of the sales were in development programs, not production, and at the outset, there was no guarantee that the company would be permitted to produce the engine it had spent 10 years grooming. In fact, the Air Force was under considerable pressure to give ramjet production contracts to bigger, more experienced companies.

Thanks to Marquardt's performance in the initial production phase, though, the Air Force stuck with the company. This month Marquardt dedicated a new \$5-million production plant in Ogden. In conjunction with this, the Air Force has appropriated funds for a \$20-million test facility west of Ogden.

- Still in the Ivory Tower—Even with full production at the Ogden plant, the company expects 80% to 85% of 1957 sales to come from research and development. Of Marquardt's 3,200 employees, 1,300 are in engineering, and

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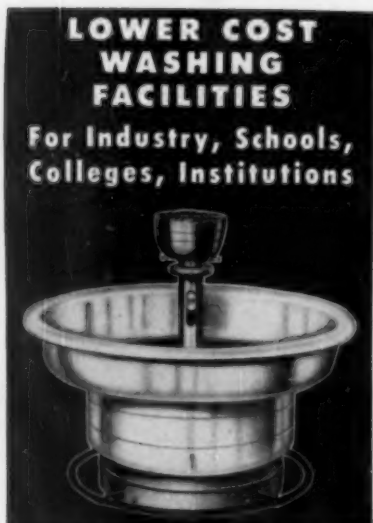
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the ratio is expected to stay at one-third or better. The plan is to keep the Van Nuys plant as a model shop, in effect.

Don L. Walter, vice-president for engineering, says the Air Force is so confident in ramjets that it's broadening the whole field of study. This will mean continuing research in all aspects of ramjet propulsion.

Today, Marquardt engineers are refining the present production ramjet and working on radical variations—ramjets linked with a nuclear power plant, advanced ramjets burning "exotic" fuels, and the like.

• **OMAR's Tent**—Some of the company's long-range technical research is a part of a program called OMAR—for Olin Mathieson, Marquardt, and Reaction Motors, Inc. The three companies are in joint research on high-speed propulsion. Reaction Motors makes the rocket engines for the initial boost, Marquardt the ramjets for long-range cruising, and Olin Mathieson the high-energy fuels.

In another department of research, Marquardt has been designated as a prime contractor in the Air Force's aircraft nuclear propulsion program.

• **Up the Sleeve**—In pursuing its one idea—the ramjet—Marquardt has developed other ideas. For example:

- Inlet controls for jet and nuclear engines produced by other companies.
- A ram-air turbine, with a generator activated by air rushing through the turbine to operate a plane's hydraulic and electric power in emergency. This is standard equipment on several fighters.

- Afterburners for jet engines.
- Reverse thrust devices to act as a brake when jet aircraft land.

Any one of these might be a bigger factor in Marquardt sales if the company weren't too busy with ramjets to exploit them fully. As it is, 83% of today's sales are in ramjets—a slight trend toward diversification from 1955's 85%.

IV. The Idea Man

The ramjet and Roy Marquardt are so intermingled that he's often called "Mr. Ramjet."

"Mr. Ramjet" was born on Christmas Eve, 1917, in Burlington, Iowa. At an early age, he hinted his future vocation by building model airplanes; by teen-age, he had won the sweepstakes in a St. Louis model meet when his entry made the longest flight on record—30 miles.

Later, he helped put himself through California Institute of Technology by building and selling model planes and writing magazine articles. During study for a master's in aeronautical engineering, he taught mathematics and aero-

dynamics at Cal Tech and USC.

• **Something of a Prodigy**—At 39, Marquardt is the youngest chief executive in the aircraft engine business. He has been so successful that employees, stockholders, and fellow engineers tend to characterize him as a genius.

But in appearance he's still the small-town Iowa boy. On Saturdays, he likes to come to work in jeans and a T-shirt. Instead of staying deskbound, he chats amiably with employees in the Van Nuys plant, where the atmosphere is relaxed and friendly. He works ex-officio as chief engineer.

With typical Marquardt informality, he invariably signs memos "Roy." Often the plant intercom will boom, "Roy, there's a call for you," instead of the more decorous "Mr. Marquardt." And he's apt to get on the intercom himself for an announcement such as: "This is Roy Marquardt. I just want to announce we had a successful flight test at Patrick Air Force Base."

• **The Marquardt Method**—Despite the president's penchant for personal contact, he has devised a management structure in which only four men report directly to him. The quartet includes Robert L. Earle, executive vice-president (he moved in three years ago from a senior vice-presidency at Curtiss-Wright, Marquardt's only ramjet rival); James Stengle, director of industrial relations; Harry Horne, director of corporate planning, and John A. Drake, director of research.

This organization reflects Marquardt's notion of how to spend his time—two-thirds on long-range planning, research, and personnel; one-third or less on operations.

V. Small Company's Chances

The rise of Marquardt Aircraft proves that it's still possible, if not easy, to start from nothing and grow to multi-million-dollar prosperity—while remaining a one-man, one-idea company. At least it's possible with the support of bigger outsiders—such as General Tire & Rubber first, a Rockefeller and Olin Mathieson later, and, of course, the U.S. Navy and Air Force. But unlike many such enterprises, Marquardt Aircraft hasn't, at any rate, been swallowed by a bigger company. It has managed to retain its identity throughout.

Roy Marquardt himself feels that small enterprise has slimmer chances today than it used to, especially in anything so complicated as developing and producing a basic power plant. Because the government finances most ideas in the field, it's vital for the company to win government confidence. Just last month Maj. Gen. David H. Baker of the Air Materiel Command warned that the Air Force won't buy weapons system components that have not been



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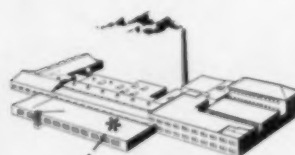
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• **Formula**—Marquardt says the trick is, among other things, "to pick the right idea; you pick one that will stay way out ahead of you for a long time." In this respect, the ramjet was perfect. Says Marquardt: "We could calculate that it would take 10 years roughly to perfect and at just about that time its development would coincide with the armed forces' need. We knew what speeds it would obtain, and we knew that these speeds would be needed."

But it's still a big problem to demonstrate—promptly and cheaply—that an idea is feasible. Marquardt overcame an early lack of testing facilities by using the Kaiser blast furnaces. Once the company proved the ramjet practical, the Air Force went all out to supply test facilities—at Van Nuys alone, \$7.5-million worth, plus the same amount again in a program slated for completion next year—to say nothing of the \$20-million test installation planned at Ogden.

• **Too Much Brick?**—There are other woes for the small enterprise today. For one thing, circumstances will have to be unusual before the Air Force will buy any more facilities. "We have all the brick and mortar we need," declared the Air Force Asst. Secy. Dudley Sharp at the dedication of Marquardt's Ogden plant.

Moreover, a company may successfully develop a product on its own, only to yield to an older and bigger outfit when it comes to production. Marquardt thinks it has passed this crisis.

• **No Dictators**—To help a small developmental company along, an optimum structure of stock ownership is suggested by Harper Woodward, aviation adviser to Laurance Rockefeller: one-third by management, one-third by the public, one-third by a financial sponsor. That way, no one group can dictate to the others.

For all the problems, the insiders at Marquardt think a small company has offsetting advantages. Says Woodward: "A small company has a sense of going ahead: It is a seed ground for ideas that don't develop in big companies. . . . If somebody doesn't sponsor a small developmental company intelligently and sympathetically, they go down the drain."

Marquardt's executive vice-president, Robert Earle, sums it up: "The spirit in a small company nearly always overcomes size in developing a product. You get a cleanness of direction. Most important, the successful maturation of a new idea, something as basic as a new power plant, depends on unending faith in the idea from the beginning. You find this in a small company. Roy Marquardt had it, and he inspired others." **END**

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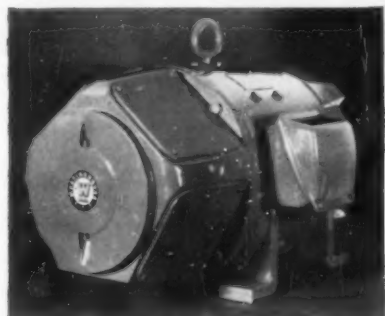
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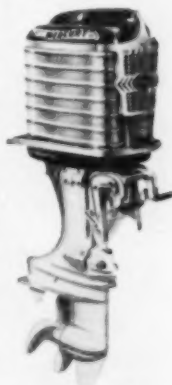


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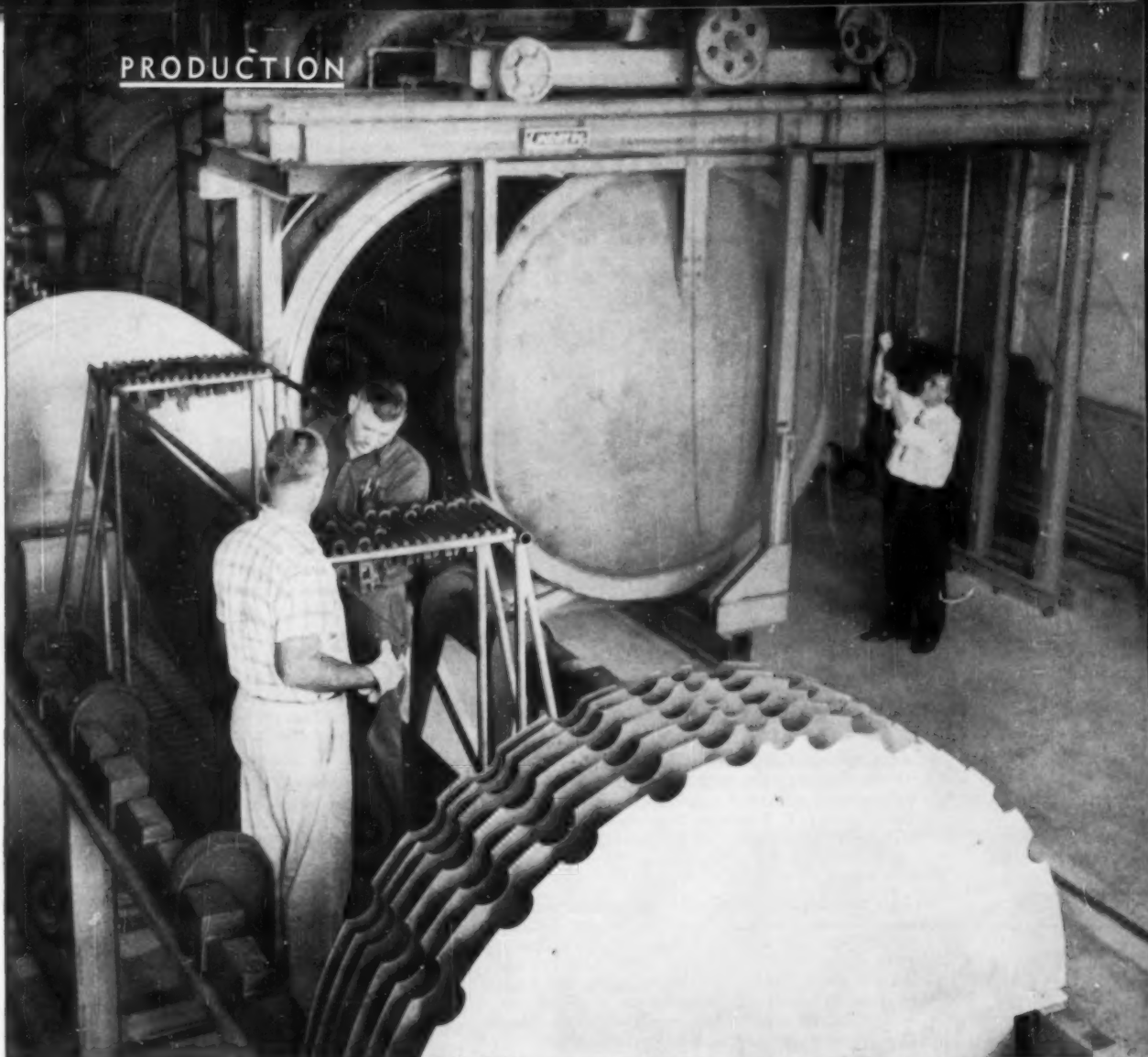
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TITANIUM PARTS for missiles are arranged on rack before being fed into North American Aviation's new vacuum furnace.

Heat, Vacuum Team Up To Treat Jet-Age Metals

VACUUM HEAT-TREATING went big-time when North American Aviation, Inc., started up the \$200,000 furnace shown in the picture. The furnace, at Downey, Calif., is called the largest and hottest of its kind in the world.

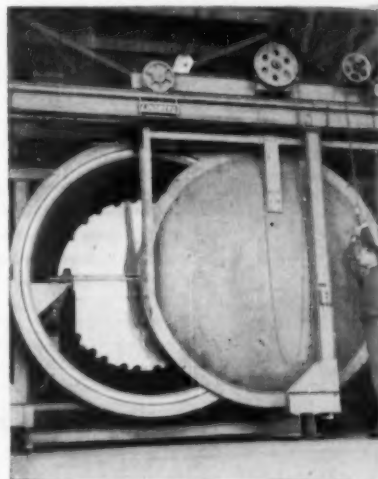
North American is using the furnace to remove hydrogen impurities from titanium parts for its supersonic Navaho missiles. It will go to 2,100F in a hot zone that's 18 ft. long by 6½ ft. in diameter—and reach a vacuum of less than one-millionth of an atmosphere.

Lindberg Engineering Co. of Chicago built the furnace; F. J. Stokes Corp. of Philadelphia supplied the vac-

uum system. Lindberg says it took a loss on the job because the future of this new type of furnace looks so promising.

• **Jet-Atomic Age**—The art of vacuum heat-treating, and its more advanced half-brother, vacuum melting (BW—Jun.9'57,p92), grew out of problems of the jet and atomic age. These hinge on problems involved in processing the new high-temperature, high purity materials such as titanium, zirconium, the newer high-strength stainless steels, and some of the special aluminum alloys.

These metals cannot be heated in ordinary atmospheric furnaces without



DOOR SLIDES shut. When it is sealed, vacuum heat will purify the titanium parts.

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At Chrysler Corporation's Engineering Garage, Detroit, Mich., cleaning the 30,000 sq. ft. floor required 30 man hours—until Clarke-A-matic was put on the job. Now, according to J. F. Fournier, Supervisor in Charge of Maintenance, one man does it in five hours, cutting costs 83% and getting the floor "really clean" to meet Chrysler's high cleanliness standards.

This specific case is typical of Clarke-A-matic's performance records. In a single pass, this self-propelled maintainer scrubs, picks up and dries up to 20 times faster than mopping. If you'd like to drastically reduce cleaning costs on large floor areas, get a Clarke-A-matic on the job. Choice of two sizes—electric, gasoline, or propane models. We'll survey your floors and tell you how Clarke-A-matic will cut maintenance costs, as it does for these users:

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undesirable chemical reactions. They pick up oxygen or hydrogen from the air, which makes them brittle (as in titanium's case) or impairs the strength of their metal-to-metal bonds.

Titanium, for example, was on the verge of being abandoned because of the brittleness of finished parts. Then the minute quantities of hydrogen picked up in the processing were identified as the cause, and ways of degassing the metal were found.

So far, degassing titanium has been the biggest use for vacuum heat treating, but many people in the industry, including Lindberg, think the more important future will be in other heat-treating and processing jobs, such as stress-relieving and brazing.

• **Coming Thing**—North American, for one, expects to use its new furnace someday for brazing steel honeycomb. However, this use is still experimental, despite the fact that most recent sales of vacuum furnaces to the aircraft industry have been ostensibly for vacuum brazing. Buyers have included Glenn L. Martin Co., Pratt & Whitney Aircraft Div. and Hamilton-Standard Div. of United Aircraft Corp., Allison Div. of General Motors Corp., and Ford Motor Co.

The main reason for brazing (a high-temperature soldering job) in a vacuum is to keep the heated joints from picking up a film of oxidation that weakens the bond.

• **Pays Off Already**—Even before it tries to use the furnace for vacuum brazing, North American is happy with its latest investment.

By degassing titanium, the company's pilot model of the furnace—with a hot zone only 6 ft. long by 29 in. in diameter—was able to salvage \$2-million worth of the metal that would otherwise have had to be sold at \$1 a lb.—less than one-tenth of its cost.

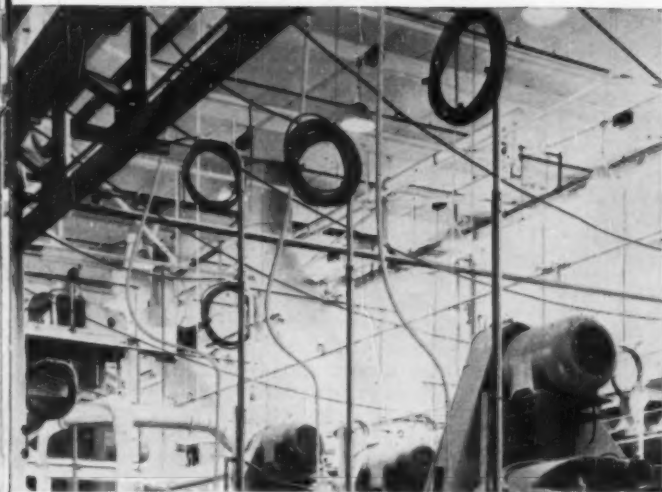
The new furnace is big enough to take full-sized sheets of titanium, which in the earlier model had to be cut up or rolled up. Now North American will have the vacuum-heat capacity to degas lower grades of titanium. A specification of not more than 150 parts of hydrogen per million in aircraft uses has put its material in the premium-price class. The company sees real savings in buying standard titanium and upgrading it in the new furnace.

North American also uses its own "Chem-Mill" process to shape some titanium parts. Chemicals etch away metal to produce the desired shape, but the process adds hydrogen impurities, which the new furnace can now remove.

• **Immature Art**—There are only about 20 major vacuum heat-treating installations in the country, for the technique barely preceded the titanium age.

Watchmakers were among the first manufacturers to use these furnaces—

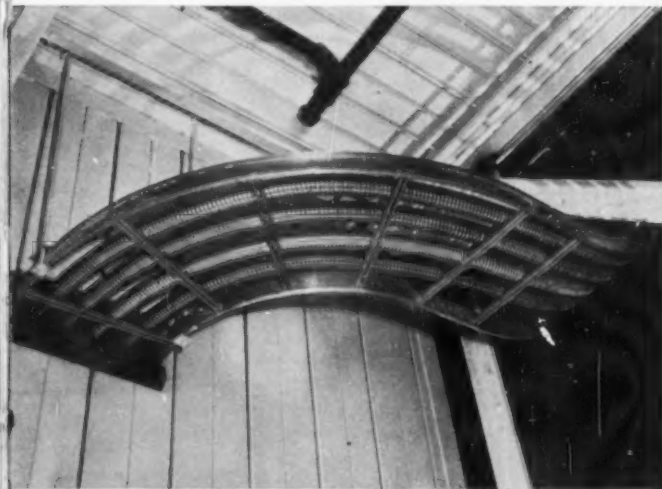
4 ways most plants can improve profits immediately with improved electrical wiring



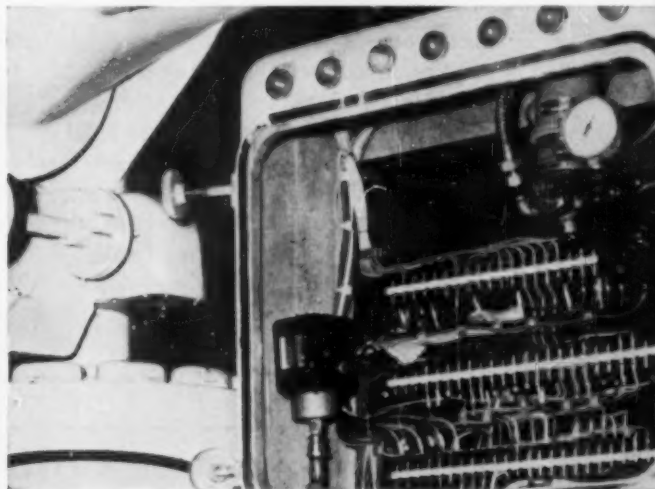
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for processing the special alloys used in mainsprings and hairsprings.

Hamilton Watch Co., for example, built its own furnace in 1939 and found that vacuum-annealing the special stainless steel alloys keep surfaces free from discoloration and tiny patches of oxidation.

The next use of vacuum heating that came to public attention was in the metallic coating of plastic toys and the coating of optical lenses. Similar plating techniques were then developed in the aircraft industry.

Lockheed Aircraft Corp. and Anadite, Inc., worked out a vacuum method of cadmium-plating the stainless steels used in such high-stress areas as airplane landing gear. Ordinary electrolytic plating processes introduced brittleness from hydrogen impurities.

• **Making Big Ones**—The problem in building vacuum furnaces is to keep them from collapsing under atmospheric pressure (15 lb. per sq. in.) at high temperatures.

This is what has kept the furnaces small in cross-section. North American's is the first furnace whose diameter can be measured most conveniently in feet rather than inches.

It is also the first departure from the two basic shapes: (1) the retort type, which resembles the vacuum bell jars of high school physics labs and (2) the tube type, which have heating chambers up to 25 ft. long but are only inches across. The 64-ft. diameter of North American's furnace puts it in a new class—the cylinder type.

Retort-type furnaces are growing bigger, too. The largest is said to be one that NRC Equipment Corp., subsidiary of National Research Corp. of Cambridge, Mass., and Hevi Duty Electric Co. of Milwaukee built for Rem-Cru Titanium, Inc. It measures 54 in. in diameter and 12 ft. deep.

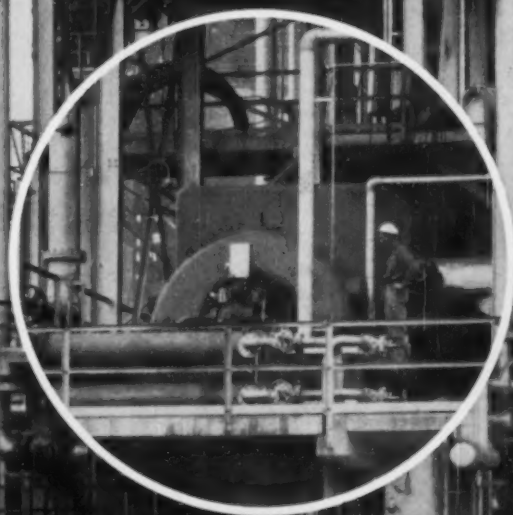
Bridgeport Brass Co. operates a typical tube-type furnace, built by High Vacuum Equipment Corp. of Hingham, Mass. It has a 25-ft.-long hot zone in an over-all length of nearly 100 ft., but its diameter is only 10 in.

• **Semi-Continuous**—Joseph Merrill, president of High Vacuum, claims this type of furnace has an advantage that will win an increasing number of users—it can be operated semi-continuously. Work can be fed at one end, undergo vacuum heating, move into a sealed cooling chamber, and come out at the other end. This once-through operation fits best into most production lines, says Merrill.

Superior Tube Co., maker of speciality tubing in Norristown, Pa., has a small-diameter tube-type furnace with a 20-ft. hot zone. Metals & Controls Corp. of Attleboro, Mass., uses a similar but smaller furnace for brazing cladding metals on nuclear fuel elements. **END**

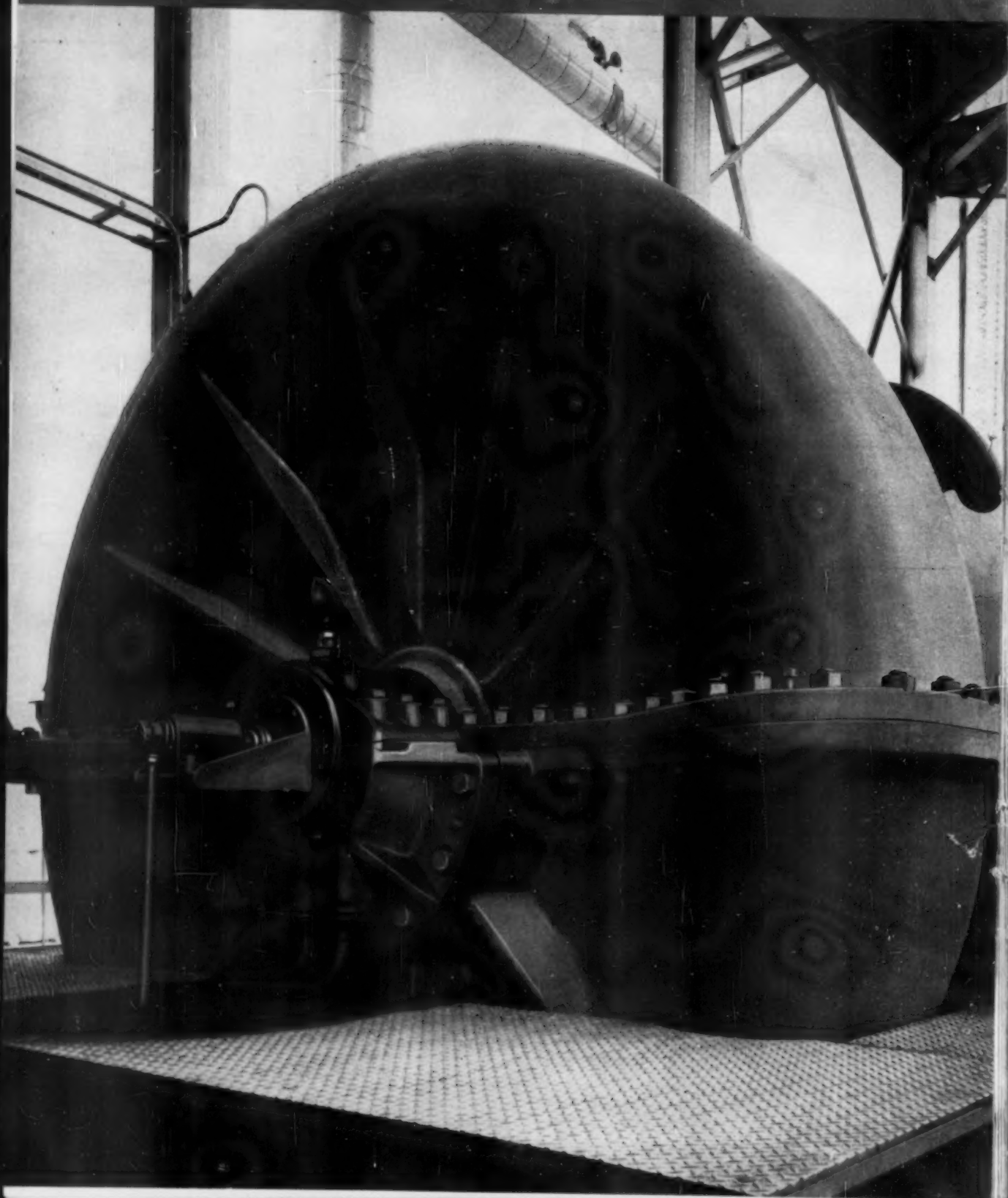
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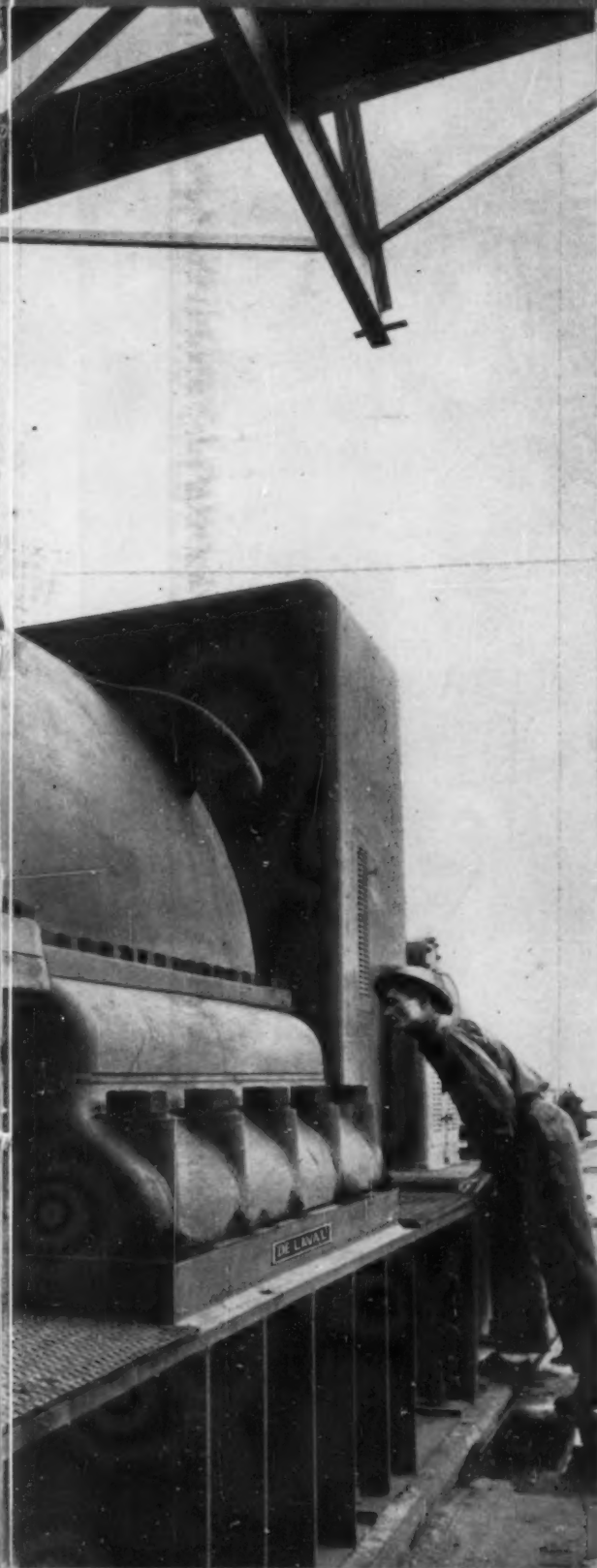


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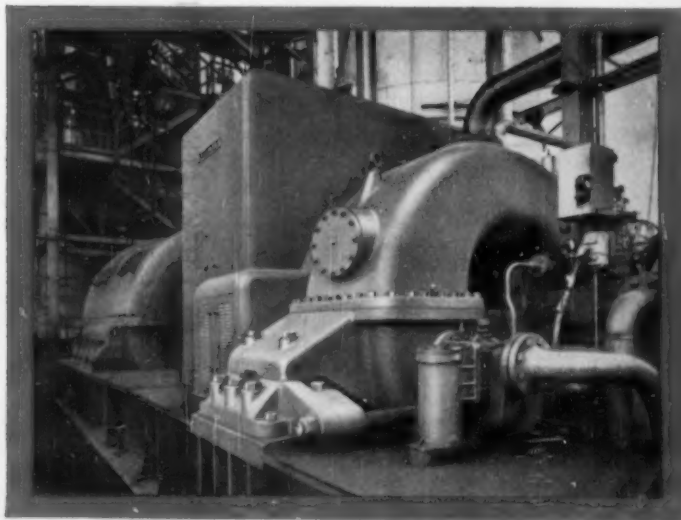
The compressor is driven by a 10,200 hp De Laval extraction turbine designed for 440 psi, operating at 700F with 1½" hg. vacuum. It extracts 150,000 pounds per hour at 155 psig.

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Keeping Autonomy The Centralized Way

Johnson & Johnson's big new plant lumps the services, keeps the products separate, leaves room for growth.

WHEN THE POSTWAR rush to expand hit Johnson & Johnson, the big maker of medical and allied products began building separate plants in various spots in New Jersey. The handsome new plants fitted nicely into the J&J gospel of product autonomy; and they paid off in solidly profitable operation.

But now J&J, still driven by the urgent need to expand, has sold off two of its shiny and gainful plants, has revised its pattern of growth, and has built one big centralized—or rather, articulated—plant on 270 acres in North Brunswick, not too far from the company's old headquarters in New Brunswick.

It's not that J&J has lost any of its enthusiasm for decentralized management and production. Instead, the company is trying to eat the cake of centralized utilities and services while keeping the cookies of divisional decentralization.

• **Headquarters**—The new shipping and manufacturing center in North Brunswick is the logical outcome of a story that began when the expansive

pressures just after the war found J&J trapped in its shambling old headquarters across the street from Rutgers University. Crowding the tract were 66 multi-story buildings of assorted sizes and ages, some of them nearly a century old.

Obviously, new plants had to be built (J&J didn't know it then, but its sales were to shoot from \$126-million in 1947 to just under \$250-million last year). The idea of individual plants strewn around north Jersey fitted nicely with the company dogma of decentralization.

The new buildings that resulted were predominately one-story structures, for J&J wanted no more of the inadequate floor-load capacities that plague it in some of the old New Brunswick buildings.

Architects and builders alike admired their use of low-maintenance materials, of color, and of imaginative window arrangements, and they were built to duplicate the durability of the old headquarters, according to C. V. Swank, a director and vice-president of manufacturing. "We really



THREE-IN-ONE HOOKUP of buildings gives J&J room for future expansions in six separate directions, and without shut-downs.

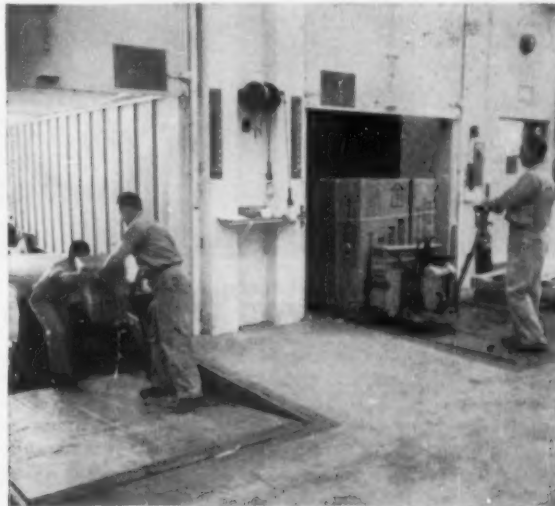
made the contractors earn their keep."

• **Added Pressure**—The first postwar manufacturing plant, for baby products, went up on a 40-acre tract in Cranford. As a plant, it did fine; but its stepped-up production just added to the intolerable pressure on the central shipping facilities at headquarters, already a hash of unsynchronized and outmoded units. There were only four truck docks, and no rail spur at all. Load limits on the old floors forbade the use of heavy fork lift trucks; goods couldn't even be stacked high.

So, J&J beat this rap in 1949 with a new shipping center on 50 acres at Metuchen. Original floor space of



HAND TRUCKS are used for assembling less-than-carton orders in the storage areas near the shipping center.



ADJUSTABLE RAMPS at the loading docks allow fork lifts to roll right aboard the trucks, regardless of their height.

◀ **NERVE CENTER** of materials handling at the J&J plant is the shipping clerk and his push-button control of conveyor system.

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"... the first idea to be rejected was one big rectangular building ..."

STORY starts on p. 94

180,000 sq. ft. was expanded to 283,000 sq. ft. in 1953.

Other streamlinings and relocations followed, but the new plants just seemed to make the old center in New Brunswick more inadequate. Finally, it was the crying need for a new adhesive plaster mill that put J&J onto the path that led to the big plant at North Brunswick. The old plaster mill was obsolete and high cost; its floor load limits made it impossible to retool with heavier equipment. So J&J budgeted roughly \$4-million for a new plant and started to hunt for a site. Metuchen, in the throes of a boom, wouldn't do; there wasn't enough space at Cranford.

• **Sales Possibilities**—It was decided to start a new plant, with a long session of soul-searching as the first step. Swank says, "We found we could sell our Metuchen and Cranford plants and rebuild all five operations at a new location plus a plaster mill, all for the same \$4-million."

Revlon, Inc., snapped up the Metuchen plant, Serutan took the Cranford building. "We got enough for them to build new facilities and pay for the move, too," says Swank.

But building the new setup offered some tough decisions for decentralization-minded J&J. The company was dead set on keeping product autonomy at the management level, but it wanted the obvious advantages of having everything under one roof. Swank lists some of them: "One big plant can get along with maybe four watchmen, where you need three at each of the separate plants. You need only one receptionist instead of three. And one power house—you can go all the way down the line."

• **Flow of Materials**—Future expansion, management autonomy, and shared administrative costs were the three broad factors in planning the New Brunswick plant on its 300-acre site, two-thirds of it manicured lawn. But efficient handling of materials was the specific consideration that got the most attention. Before it turned out a blueprint, the designer and builder—Walter Kidde Constructors, Inc., spent long hours with J&J management teams. The first idea to be rejected was one big rectangular building. "It would have given us only four directions in which to grow," says Swank. Finally, a design was accepted that included 635,000 sq. ft. in three distinct but interconnected buildings. Each unit can be expanded in two directions, for a total of six ways to grow, without interfering with other operations. Manufacturing and

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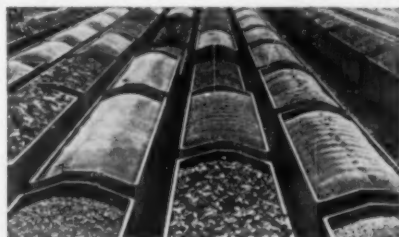
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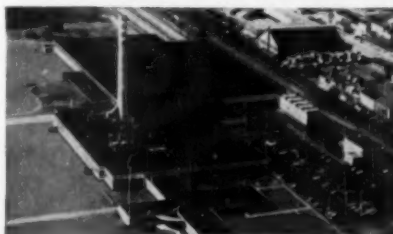
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shipping units retain their autonomy,
yet utilities and materials handling are
interconnected.

At Metuchen, the shipping depart-
ment had a palletized system using
fork lifts and small four-wheeled hand
trucks that were adapted to tow lines
installed under the floor. The North
Brunswick plant was designed to use
as much as possible of this equipment;
the heart of its materials handling
system is a 3,600-ft. closed-loop under-
floor towline, that links all the manu-
facturing operations to the shipping
center. A towed truck, moving at a
constant 60-ft.-per-min., makes the com-
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moved by hand, and can be unhitched
from the towline at any point.

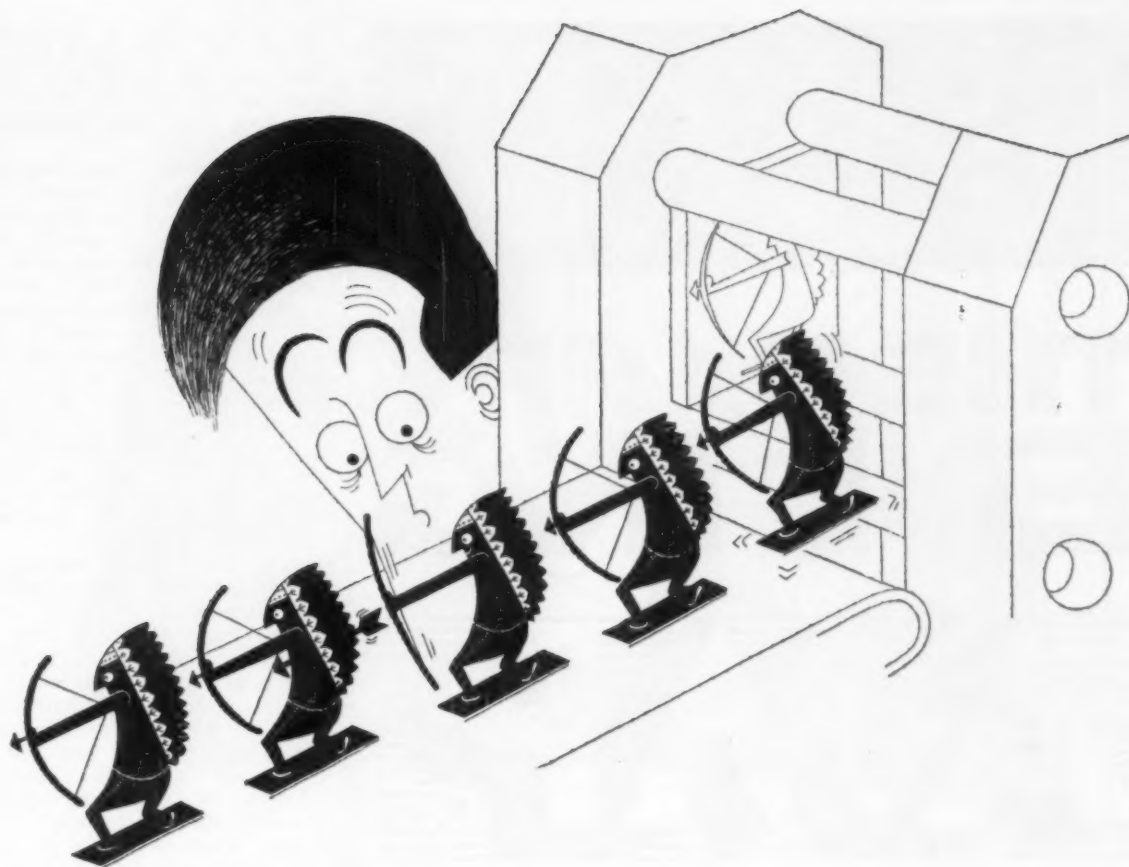
- **Separate Tows**—In the shipping center itself, two independent 2,000-ft. towline systems snake through the storage area to assemble orders, and end up at a 12-truck loading dock. The dock's gangways are adjustable to the varying heights of truck beds, so hand trucks and fork lifts can roll directly aboard.

Also in the shipping center building, a 410-ft. enclosed rail siding and four truck docks were designed for both shipping and receiving. And the two manufacturing sections have their own truck docks and shorter rail sidings for receiving raw materials. The idea of a single receiving area for all areas was rejected: It would have hampered expansion, cut into the flexibility and autonomy of the manufacturing operations.

As a matter of fact, in the final setup there was some consolidation of manufacturing operations. Five distinct operations are fitted into the three building areas, under three plant managers. Baby products and orthopedic products were lumped in one plant, in 100,000 sq. ft. The new plaster mill was combined with surgical adhesives—which will turn out the Band Aid line of adhesive bandages among other things. The shipping center is the largest of the building sections, covering 285,000 sq. ft., including its offices. But the offices and laboratories of the manufacturing divisions are kept separate, in the legs that connect the building sections. That spares them from crowding, dust, and noise.

- **Double Duty**—All the operating areas were designed to make logical use of the conveyor system, so that the main towline can deliver raw materials as well as carry away the finished goods.

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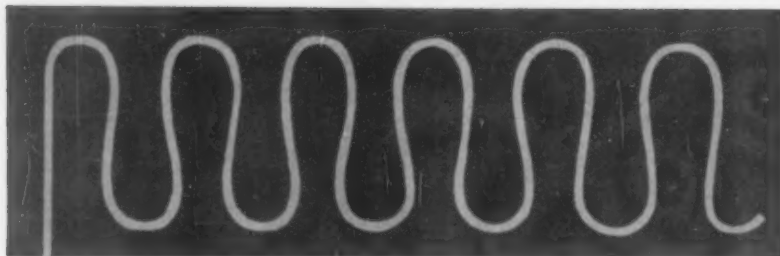
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an underfloor coil as the truck approaches the station, this in turn activates a warning bell or light. All the trucks are kept automatically circulating round and round, unless they are set for the shipping area.

• **Nerve Center**—Trucks carrying finished goods move from the area of their manufacture to a corner of the shipping area, where they circle docilely around the desk and control board of the shipping clerk. This key man in the whole materials handling setup then consigns the pallet loads to inventory or to shipping. He is equipped with an up-to-the-minute picture of all inventory, push-button controls for the stops on the conveyor, squawk-box communication with the shipping docks, and two-way radio contact with the fork lift trucks. The unending flow of pallets and trucks keeps him as busy as the towerman at a big airport.

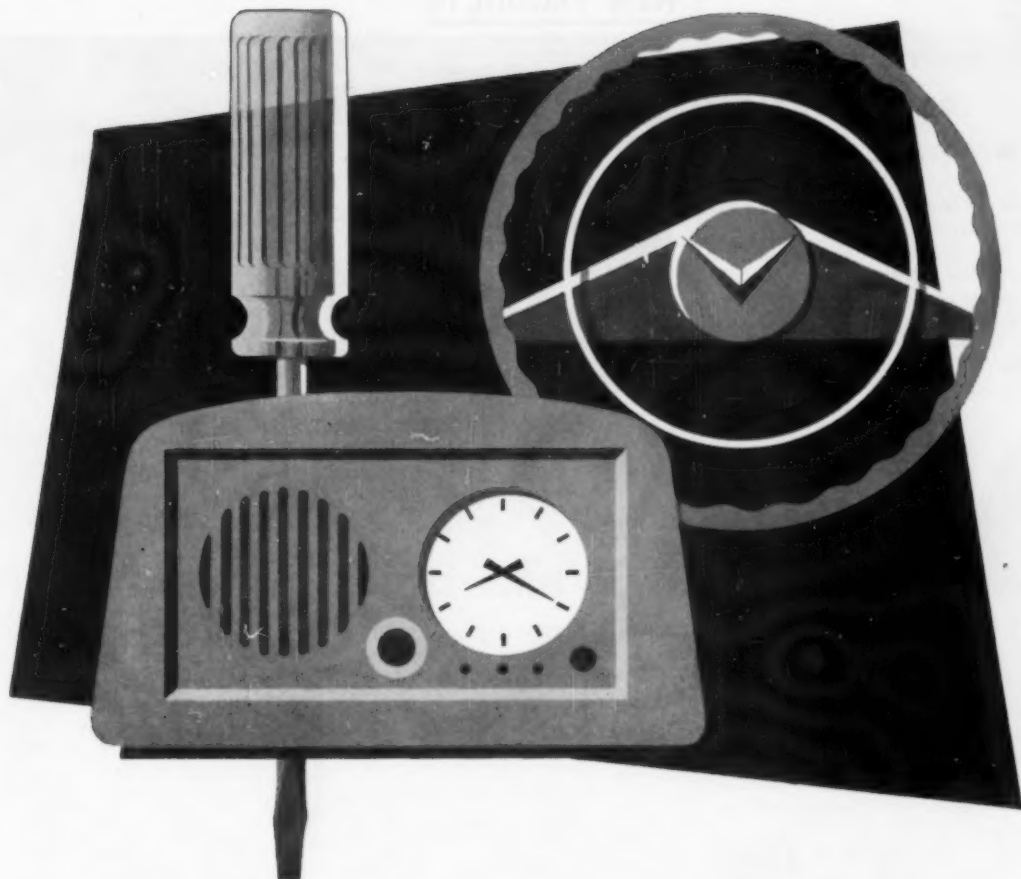
J&J is convinced that the plant will give a big boost to production efficiency and cost-cutting, although it doesn't have the figures to prove it yet—in fact, the plant won't be really completed until September. Swank says that 7½ years have been allotted to writing off the \$4-million that went into the project. But he adds, "Already we're certain it will be paid for long before that."

He likes to dwell on the enthusiasm of middle management people for the project. Two major shifts in a rather short period enabled them to refine all their operations. What they learned in the first move enabled them to improve flow in the second.

Swank is just as excited about the expansion possibilities, with 200 acres still unused in the tract, and six-way growth available. "We've even built the conveyor lines right to the walls," he says, "so we won't have to tear up the floor to extend them. And the unused spurs are a constant reminder of the expansion possibilities."

• **Another Move**—There's an excellent chance that J&J will eventually move its headquarters from New Brunswick to the new tract; the blueprints already include an office structure nicely fitted into the existing layout. But that is still a long way off, spokesmen say. The company is still much attached to its old home and sees no need to move for some years.

Of course, if and when that ultimate move is made there will be the problem of what to do with the old buildings. "We're already tearing down some of them," says Swank, "and we'll tear up others and landscape the whole area. We've learned that a well-kept plant is never a drug on the market. Why, people are still asking us if they can buy the plants we sold to Scrutan and Revlon. When we say the plants are gone, they ask if we have any others we'd like to sell." **END**



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MARKED IMPROVEMENTS in IDENTIFICATION AND DECORATION

Markem's original foothold... in business was really just that: making marking machines for the shoe industry. Since then (1911), the shoe field, and nearly every other industry, has been using the Markem Method more and more. Where Markem was "in at the beginning", you'd expect to see a lot of Markem in the shoe business, and you do. Our 32A's imprint payroll coupon tags; jobs for the 1000, 24 or 79AB, and 105-10 or 45AC include quarter lining, match marking, heel pad and sock lining embossing. Currently, a brand new match marking machine is being field tested, along with some special marking compounds for "hairy" hide. Our "special" field, that began at the foot of the ladder, now reaches from one end of industry to the other.

Nothing succeeds like... successful use of Markem machines, it seems, especially with one of our electronics customers. Since 1952, they've bought 42 Markem machines of five different types: 20A's for cylindrical objects; a 25A for marking boxes, tape, etc.; half a dozen high production PLBR's for cylindrical objects; 45AC's for irregular shapes; and more than two dozen 45A's. Latest use of a 45A is imprinting a new type of condenser having right angle wire leads. This customer isn't really typical—but, like all our others, he does know the value of the right marking method for a given job.

13-9-12—Markem! Markem Machines are used throughout "industry", but the things "industry" marks often end up in the corner store, gas station and gift counter. For example, you may not associate "industry" with "sporting goods", but several sporting goods manufacturers use the Markem Method. For example, one company had been sewing two separate fabric labels on football players' hip and kidney pads (we sent in a substitute illustration you'd recognize). Now, trade-name, size, etc. is imprinted directly on the outside of the curved fibre pads, with a 45A, effectively blocking label inventory problems and sewing costs. Maybe your "industry" has some unsolved marking problems. If so, we'd like to tackle them.



A letter, call or TWX could bring the marking help you need—or can use. The address is Markem Machine Co., Keene 33, New Hampshire.

MARKEM

102 New Products

NEW PRODUCTS



It Walks on Snow, and Swims

This 1,500-lb. tandem, tracked vehicle, called the Rat, can run up a 50-deg. slope with a 600-lb. load or can swim around in deep water with equal ease. It was built for the Canadian government by Canadair, Ltd., for military use.

The vehicle's front section has a 4-cylinder, 35-hp. air-cooled gasoline engine that powers the tracks of both the front and rear section. A system of cables controls the joint between the two sections for steering. The Rat can turn in a circle of 18 ft. in deep snow.

Wherever possible, aluminum has been used in the vehicle's construction. As a result, it doesn't sink into snow that is often too soft to support a man on snowshoes.

Canadair thinks the Rat will find other users besides the military. The potential market includes trappers, foresters, construction crews, surveyors, hunters, and fishermen, the company says.

When the Rats go into full-scale production, the price is expected to be in the \$6,000 to \$8,000 range.



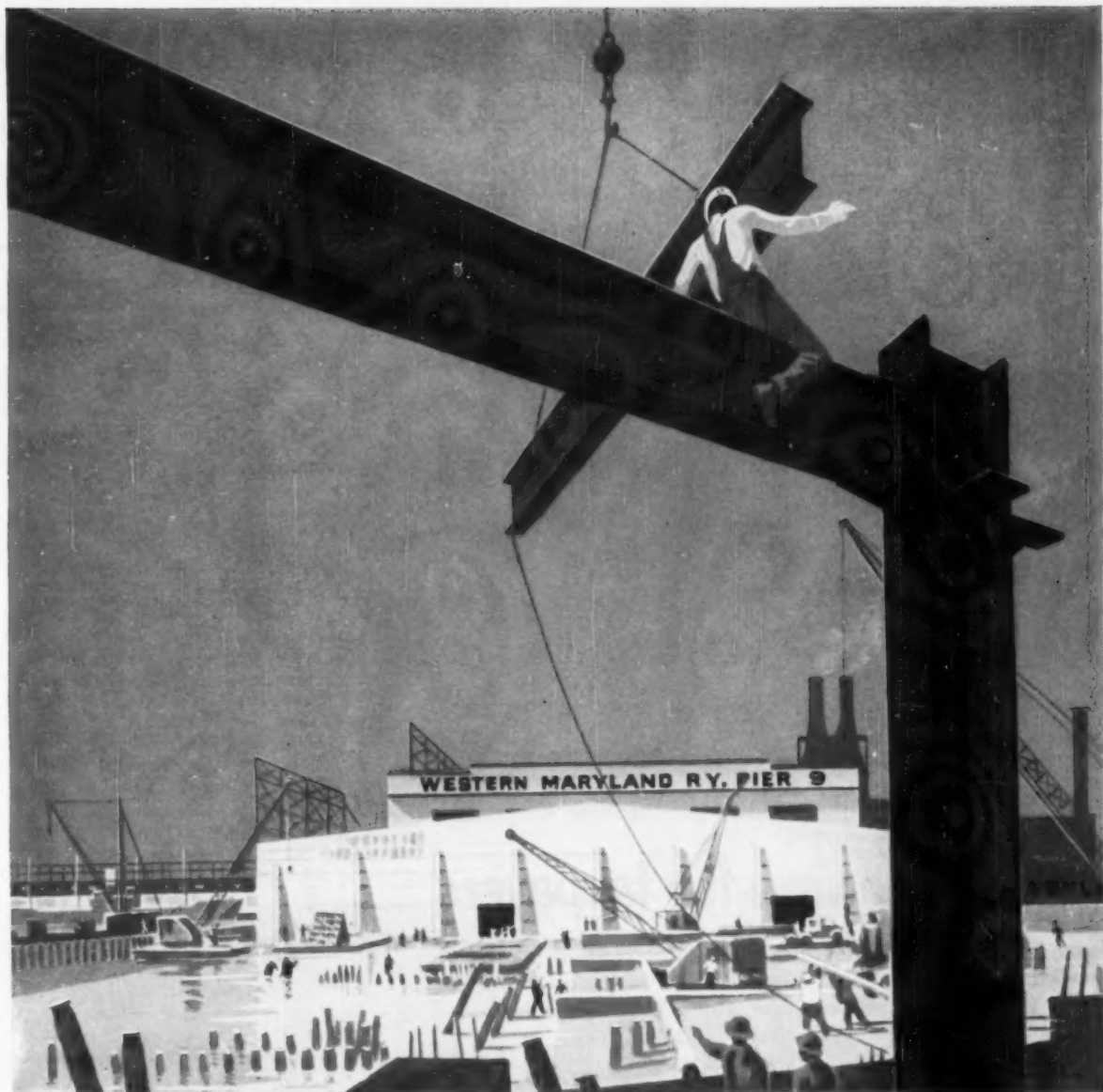
Keeping Trailers in Line

The device that's shown here is designed to remove one of the major fears of truck drivers—the jackknifing of tractor-trailers. It was developed by

K-W Mfg., Inc., of Schenectady, N. Y.

The device has two main parts. A spring enclosed in a cylinder on a pivot is mounted on the tractor. A high-

BUSINESS WEEK • June 22, 1957



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Here's an excellent example of Gar Wood's leadership in engineering. New Cyclomatic Packing on the LOAD-PACKER 500 obsoletes other designs. Speed, combined with simplicity of operation, makes loading faster and more efficient . . . makes compaction far greater. In competitive Sanitary Department tests, the LOAD-PACKER 500 delivered up to 25% greater loads. This means better collection service at lower cost.

Gar Wood pioneered the world's first sanitary packing-type refuse-collection equipment. In more than 2700 municipalities, these units mean greatest health protection, greatest long-term economy for 45 million taxpayers. In every way, Gar Wood gives you more to bank on.



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Tractor Equipment



Plate-Gates



Hoists & Bodies



Ditchers

strength chain is attached to the cylinder and to the bottom of the trailer. If the tractor swings to the side in either direction beyond the safety point in either direction, the chain tightens and pulls the tractor back in line with the cab. The spring absorbs the shock of the load. This prevents jackknifing and helps the driver control his vehicle.

The safety device can be welded or bolted on any type of tractor-trailer.

NEW PRODUCTS BRIEFS

A starting device for outboard motors, chain saws, generators, and other equipment using combustion engines has been developed by Simmons Starter Corp., Albany, N. Y. The device is held in the chuck of an electric drill and the starter end is applied to the nut of the motor flywheel shaft. When the drill is started, the flywheel revolves and the motor starts. It costs \$17.50, post paid.

A luxury packaging material that is coated with short fibers of cotton or rayon to give it a velvety sheen before it is formed is being made by Gilman Bros. Co., Gilman, Conn. The new material, called Stylour, comes in a large variety of colors and is said to be especially attractive when formed as a tray for silverware, electric razors, and other items merchandized in attractive cases or behind transparent box tops. Cost runs between 50¢ and \$3.50 for 26 in. by 36 in. sheets.

Static electricity in material woven of Amel triacetate fiber can be eliminated by treating the fiber to give it a skin of cotton-like cellulose, says Celanese Corp. of America. The static causes the garments to cling to the body in wrinkles and to attract airborne lint. Celanese Corp. is making information on its new anti-static process available to textile manufacturers.

Wireless neon letters that can be moved and interchanged on display signs are being manufactured by the Radalite Corp., Long Island City, N. Y. The lights do not need any electrical connection to the sign, merely sit in a slot. They receive their electrical current from a high frequency radio transmitter which is tuned to the Federal Communications Commissions miscellaneous band and is wired to the sign. The letters come in five colors and can be changed in a matter of seconds. A sign with two racks 3 ft. long, 40 assorted letters, a 120 volt AC transmitter, and coaxial cable costs about \$200. Additional letters are \$1.50 each.

Short cuts with Recordak Microfilming

Latest reports on how this low-cost photographic process is simplifying routines for more than 100 different types of business . . . thousands of concerns



NEVER QUESTIONS LONG-DISTANCE CHARGES

Annandale, Minn.

Customers of Lakedale Telephone Company can readily recall long-distance calls—even if "forever on the phone."

To refresh memories and answer questions in advance, the company microfilms the toll tickets, which operators time stamp and fill out for each call. These are then sent out with the bill. Customers are all for new system—can even check the "minutes spoken" on time-stamped tickets.

The company, meanwhile, only has to show the total charge and tax on its bills—saves posting more than 115,000 toll tickets per year. Film costs run under \$4 per month . . . and a low-cost Recordak Microfilmer takes the pictures.

Small wonder that more than 300 telephone companies use this system, which cuts billing costs 50% or more.



ELIMINATES TISSUE COPIES IN SALES BOOKS

Los Angeles, Calif.

The May Co., one of the country's leading stores, discovered that microfilm copies cost less than carbon copies and are far more practical. More than \$10,000 per year is saved by using a 2-part sales check instead of one with 3 parts. And a like sum is saved on storage costs.

Here's how the new system works: Customers get duplicate tickets with purchases. The originals go to the Sales Audit Department, where they are photographed in a Recordak Bantam Microfilmer. Film record—instead of tissue copies—becomes Sales Audit's permanent record. Sales checks are promptly routed to Accounts Receivable Department . . . returned to charge customers with monthly bill. (A separate use of Recordak Microfilming cuts costs here.)

The Recordak Bantam (illus.) is ideal for May Co.'s Sales Audit use—photographs and date-stamps up to 500 tickets per minute; has an electric counter that gives accurate check on sales activity.

* * *

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These units, installed in the Main Library and two branches, photograph the borrower's card, book card, and a date-due card. This ends rubber-stamping, book "slipping," card filing and counting—more than 100 operations all told. Same staff now handles twice the circulation . . . service to public is greatly improved. All over East Orange you'll hear about "our library's progressiveness." "Recordak" is a trademark

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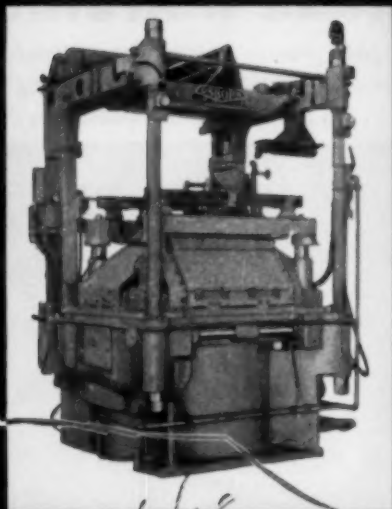
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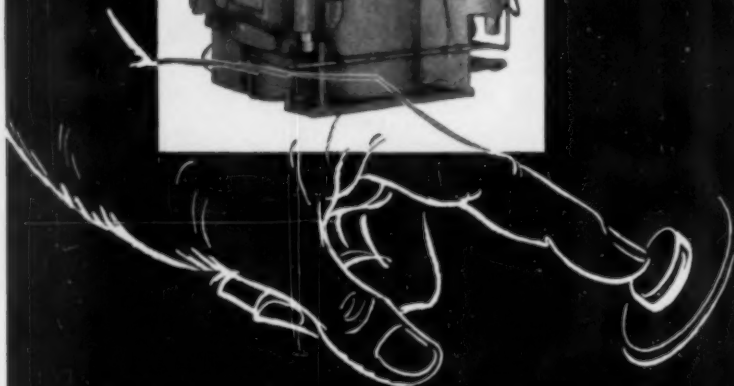
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Business Reacts to GM Decision

● The Supreme Court's dim view of the du Pont interest in General Motors is taking wide effect on corporate planning.

● As a result, there is sure to be a sharp slowdown in mergers—currently one of the most popular ways to expand.

● Small companies are the least affected immediately, but the ruling poses long-term problems for them, too.

THE END of an era may be at hand. The unexpected decision of the Supreme Court in the General Motors-du Pont case adds one more stone—and a big one—to the wall rising against corporate growth through acquisition. Though there's a vast amount of confusion among corporation officers and counsel as to what the latest decision really means, there is widespread agreement on one point: the rate of mergers in recent years (864 in 1955, almost as many last year) is due for a sharp slowdown.

• **Stronger Posture**—Certainly, now that the Supreme Court has indicated it is taking a tougher attitude, the Justice Dept. is flexing its muscles. Last week, for instance, it stepped up its campaign to block the proposed merger of Bethlehem Steel Corp. and Youngstown Sheet & Tube Co. by asking for a summary judgement in Federal Court.

True, Federal Court action was postponed until the fall—and antitrusters insist the motion had been in the works for several weeks anyway. But observers suggest that the particular timing, so soon on the heels of the GM-du Pont case, indicates that the Justice Dept. sees a more favorable climate for its case.

• **Bogey of Bigness**—Today the economy may be at a crucial point in the battle raging around "bigness"—a term that almost nobody attempts to define. There's little question that the trend has been toward growth and integration by acquisition of going concerns. The concentration has been most visible in the appliance, milk products and container industries.

In the past few years, a lot of industry spokesmen have been suggesting that the fully integrated, monolithic industry must be the pattern of the future.

Yet the barriers have been rising fast. There's been a terrific stepup in Federal Trade Commission filings of complaints challenging the legality of mergers. Between 1950—when the anti-merger law was strengthened to include

physical mergers as well as stock mergers—and the end of 1955, only 11 cases were filed. In 1956 alone, 17 more cases were filed.

• **Decision After Decision**—In March of this year, the first real decision against business under the 1950 law came in an FTC examiner's ruling that Crown Zellerbach Corp. must divest itself of the plant and assets it acquired of St. Helens Pulp & Paper Co. In May, the Supreme Court invalidated some of the tax-loss mergers of recent years in the Libson case (BW—Jun. 1 '57, p.39). In this case, the court ruled that a company can't reap tax savings from a merger with a loss-corporation unless it is in precisely the same business and has a similar corporate structure. This decision could apply to many mergers already consummated and make others less desirable.

A pre-merger notification bill—that would, in effect, give the government the right to disapprove any merger in advance—has already been approved by the House Judiciary Committee (BW—May 25 '57, p.153). It is expected to pass, if not in this session of Congress, then in the next.

• **Telling Punch**—But the new principles stated in the latest case—though decided on the narrow issue of du Pont's alleged domination of the automotive finish and fabric business through its holdings in General Motors—could have the most staggering implications of all.

For the first time, vertical integration—the acquisition of a supplier or customer, rather than an actual or potential competitor—has been considered illegal and subject to antitrust prosecution. Arrangements dating back 40 years can now be broken up. Arrangements made today could go on uninterrupted for a generation and then be attacked.

For antitrusters, new vistas have opened up—and they are scrambling to find parallels. One muses: "It wouldn't be hard to find similar stock relationships in almost every major industry."

• **Time Will Tell**—How is all this

going to affect an economy where the developing pattern is growth by acquisition? BUSINESS WEEK reporters talking to executives and counsel last week met three reactions:

• A frequent refusal to discuss the subject at all.

• A good deal of optimism that future judicial and legislative actions would reverse or at least modify, the apparent trend.

• Much caution about the immediate future.

There seemed to be a general tendency to argue that only the giant companies would be subject to attack, that acquisitions by medium-sized outfits could probably proceed merrily, and that mergers among small companies would actually get government blessing. But some lawyers note drily that of the two dozen Clayton Act actions currently pending, the vast majority are against companies in the "medium" range; in some, the defendants are "small."

• **Moratorium**—Several corporate attorneys agreed that the tendency, for a while, will be to exercise care on future acquisitions "unless it's absolutely clear-cut that no threat of a federal suit lies in the future in the specific case."

One giant company—which has some 100 other companies under review for possible acquisition—says it's calling off all negotiations for a while until the situation clarifies. Another big one, already being eyed by the Justice Dept., argues the complete legality of its past acquisitions, but adds: "Anything else we buy, we're buying lawsuits with. So we probably won't even look around for another five years—we'll consolidate what we have, and watch how the wind blows."

• **Way Out?**—There's talk that if the new wave of restrictions makes it difficult to buy into a new business, companies would simply grow their own integration or expansion "from the egg." But the vast majority of acquisitions over the past decade has come through exchange of stock. Comparatively few companies would have the cash to start new businesses of important size from scratch. Anyway, in many fields of industry today, learning a new business, developing strange products, finding the people, and cracking a market is impractical or prohibitively expensive.

A number of executives indicate that while they'd have no questions about making and selling a related product, they'd hesitate a long time before going into another industry without being able to take over a going concern.

• **Long Pull**—Small companies, least

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affected immediately, seem worried about the long-term effects. In some industries, such as electronics, it's still possible for a new company to start on the strength of a single new development. But executives in the field suggest that it's possible to grow only so far before bucking against giants like General Electric, IBM, or RCA, and that real growth—perhaps even survival—is possible only through an alliance of two or more of the smaller outfits.

The cumulative effect of the anti-merger moves is to put some of the small companies in a box. Notes one lawyer: "Many of these small companies, privately owned or corporate, that want and need to sell themselves are stymied. The ruling doesn't affect them directly, but until the whole situation is clarified, there's no real market."

• **Amputations**—The fact that vertical integration is now subject to antitrust attack opens questions for many companies that had believed themselves completely in the clear—particularly if the courts seem to follow the divestment pattern suggested in the GM-du Pont case. Says one corporation counsel: "In most cases subject to attack, the acquired company has simply been integrated with the bigger company. After a year or so, there's no valid way of identifying it. It's possible for the courts simply to order that a certain segment of a company, or a certain proportion of its business, be lopped off. There's precedent for that, in the Standard Oil and tobacco trust cases. If it's very involved, it could shatter a company."

There's a hint of one paradoxical effect of the growing barriers. Most of industry has been against the proposed pre-merger registration bill. Now there are suggestions that it may be getting unexpected backing directly from businessmen. Explains one company president: "Sure, it gives the government another club over us. But as things are now, especially since the du Pont ruling, no one knows quite where he stands. But if the government approves a merger beforehand, you'd have a powerful legal weapon if the question does arise later. And if they say no, maybe you're no worse off than before."

• **Blessing in Disguise?**—There are even some indications that some companies might accept the implications of the ruling with real, if well-disguised, relief. One consultant suggests that some acquisitions have been made simply because managements have felt they might be out of jobs if they didn't provide stockholders with tangible signs of growth. The decision gives them an out. Now they can't go around acquiring more companies if the law says no—and they gain some breathing time in which to consolidate what they've got. **END**

1956

Donoch W. Lynch, Manager
Distribution Transformer Department
General Electric Company, Oakland, California

1946



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(Metropolitan Oakland Area)

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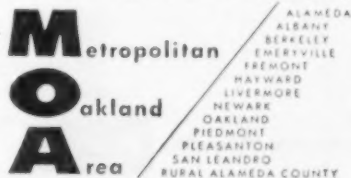
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The Big Boss Gets the Biggest Vacation— But Lots of Times He Doesn't Take It

Vacations with pay are getting bigger and better; sometimes—but not always—the top executives get the biggest and the best.

The National Industrial Conference Board surveyed 301 companies, finding that 99% of them now grant vacations to all employees, compared with only 46% before World War II.

The greatest relative increase has been for hourly workers, for whom vacations with pay are a relative novelty. Before the war, the hourly worker could get time off, but he had to spend his own savings. Now the question isn't whether he gets a paid vacation, but how much. And the answer is: more and more.

Ten years ago, 79% of the companies surveyed had a two-week ceiling on vacations for hourly workers. Now, only 16% have a two-week ceiling, 64% go up to three weeks, and 20 go clear to four weeks or higher.

Salaried workers still do even better. The percentage of companies offering them up to three weeks has climbed to 63%, from 21% in 1947. And 24% now have maximums of four weeks or more.

Theoretically, at least, top executives get by far the best deal of all. Nearly a third of the companies allow them more than their seniority calls for; quite a few just let the executive set his own vacation.

The hitch is that too few of them take what they have coming. In a different survey, covering 181 companies, about a fifth said that executives don't take full vacations. Indeed, a number of health-conscious companies are combatting this by forcing the top brass to lay off for at least two weeks at a time, preferably twice a year. Some companies set up formal vacation schedules to make sure that the executives get their rest.

• • •

More Colleges Are Offering Management Training Courses

Executive development programs in universities are popping up like mushrooms. In 1950 they were a rarity. In 1954, the National Industrial Conference Board counted 17 of them. Now NICB finds 32 of them, averaging four to six weeks in duration and capable of handling 1,955 men per year.

As the NICB defines them, university executive development courses run two weeks to eight months and participants leave homes and jobs behind them to become full-time students. NICB's current review includes a description of course content, duration and cost of courses, and general comments by 32 companies that have sent a total of 1,800 executives to one or more of the programs.

Cost of the programs varies depending on the school

and the length of the course. Michigan State, for example, offers a four-week course for \$500, but room and board are extra. Columbia's six-week course comes to \$1,750 for everything—tuition and living expenses. Harvard's three-month course costs \$2,400 for tuition and living costs; tuition for Harvard's longest course—the 7½-month middle-management program—is \$1,500, with living expenses extra.

Courses, generally aimed at developing top managers, are usually built on a combination of guest speakers and some form of the case-study system. Instructors usually are regular staff members of the schools involved.

• • •

Running Down Watch Company Gets a New Main Spring

Waltham Watch Co., in the red or near it for the past 12 years, and now operating under its sixth management in 10 years, is getting set to try again.

The new group, which took over control of the watchmaker from Sidney Albert's Bellanca Corp. last year, plans to change the corporation's name, then split the firm in two.

Waltham Watch Co. will become Waltham Precision Instrument Co. Then a new company, Waltham Watch Co. of Delaware will be set up within the instrument company and later spun off.

The new company will concentrate on development and marketing of watches and clocks—including brands other than Waltham's. The instrument company will make gyroscopes, components and timing devices, and aircraft clocks. It will also make watches (it might lose existing tax loss credits if it changed businesses) for itself and other firms. Last year, Waltham had a loss of \$42,300 on sales of \$4.2-million.

• • •

Beset on Three Sides by Patent Suits RCA Files a Counter-Suit of Its Own

The situation in the complex electronics patent situation got a little more complicated last week when Radio Corp. of America filed a counter-suit against Philco Corp., charging infringement of patents.

RCA is currently being attacked on antitrust grounds from three directions—the Justice Dept. has a suit against it, and both Zenith Radio Corp. and Philco have triple-damage claims, all three charging RCA exercises a monopoly through its licensing rights in a patent pool that includes a large share of all electronic patents existing. The counter-claim against Philco came as part of RCA's answer to the suit filed by Philco last January, which asked triple damages of \$150-million. RCA's not-expected counter-suit is also asking triple damage for the alleged patent infringements.

Although charges and counter-charges have been flying for several years, some of the facts should get public airing soon. Zenith's suit, charging that RCA's alleged patent monopoly kept it out of foreign markets, is scheduled for trial in Chicago starting this month.

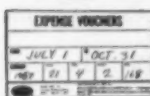
easy solutions to RECORD STORAGE PROBLEMS

Problem: How to store original records for future reference at lowest possible cost.
Answer: Liberty Record Storage Boxes—for over thirty-eight years recognized by industry as the lowest cost method for housing inactive records.



Heavy-duty corrugated fibre-board construction gives ten, fifteen, twenty years of service and cuts costs way down. Just pennies a year does the job!

LIBERTY INDEX SYSTEM



Factory applied labels with gummed title strips a Liberty Box feature.

Liberty Boxes provide for "fast finding" of stored records because of its unique label design. The Liberty label assures you a simple, easy-to-use method for indexing and filing your transferred records.

LIBERTY FEATURES



C. & N.W.R.R. file room is both neat and efficient.

Your records are always protected against dust, dirt and dampness due to the unique cord and tension button closure. If accidentally dropped, the contents can't spill out. 25 stock sizes available covering every popular office form—special sizes to order.

LIBERTY USED AND SOLD FROM COAST TO COAST

Liberty Boxes are stocked by stationery and office equipment dealers in every state, in every principal city. Write for the name of your dealer and a copy of our latest catalog. No obligation, of course.



Low cost installation at Southwestern Bell Telephone



DRAWER STYLE TRANSFER FILES

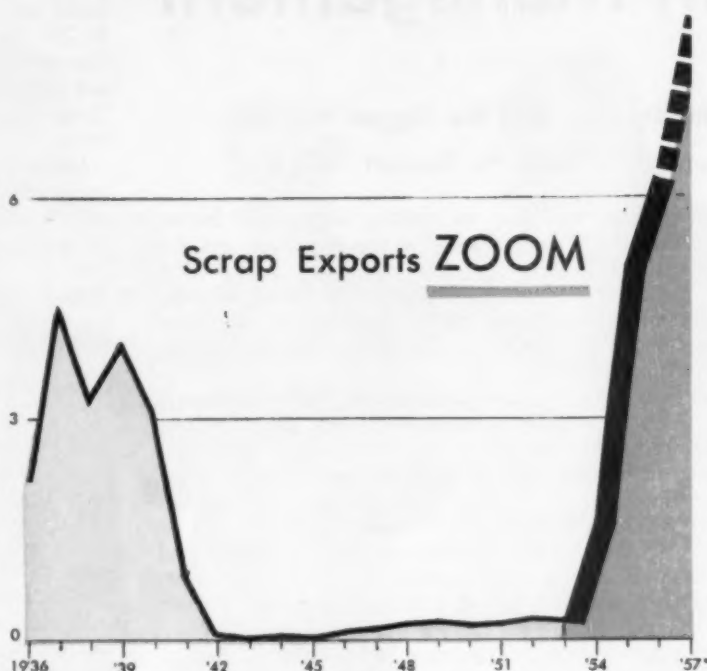
STAXONSTEEL Transfer Files build their own steel framework as they are stacked—no shelving required. Easy gliding drawers at any height. Available in Legal, Letter, Check, Freight Bill and Tab Card sizes.

BANKERS BOX COMPANY
2607 North 25th Avenue • Franklin Park, Ill.

COMMODITIES

Millions of Tons of Scrap Iron & Steel

9



Data: Dept. of Commerce.

* First quarter annual rate

© BUSINESS WEEK

U. S. Jams on the Brakes

Steel industry wins out as foreign buyers agree to limit scrap exports to 12% rise over 1956.

Scrap dealers are a bit unhappy, but rising scrap prices tame complaints.

Steelmen, who haven't had too much to crow about this year, won a victory in Washington this week as the Dept. of Commerce announced a voluntary lid has been placed on soaring ferrous scrap exports (chart). Under a gentlemen's agreement, foreign buyers agree to hold imports to no more than 12% over last year's record 6.3-million tons.

Although there's no force of law behind the clamp, it's a binding limit from a practical standpoint. As such, the decision has wide repercussions.

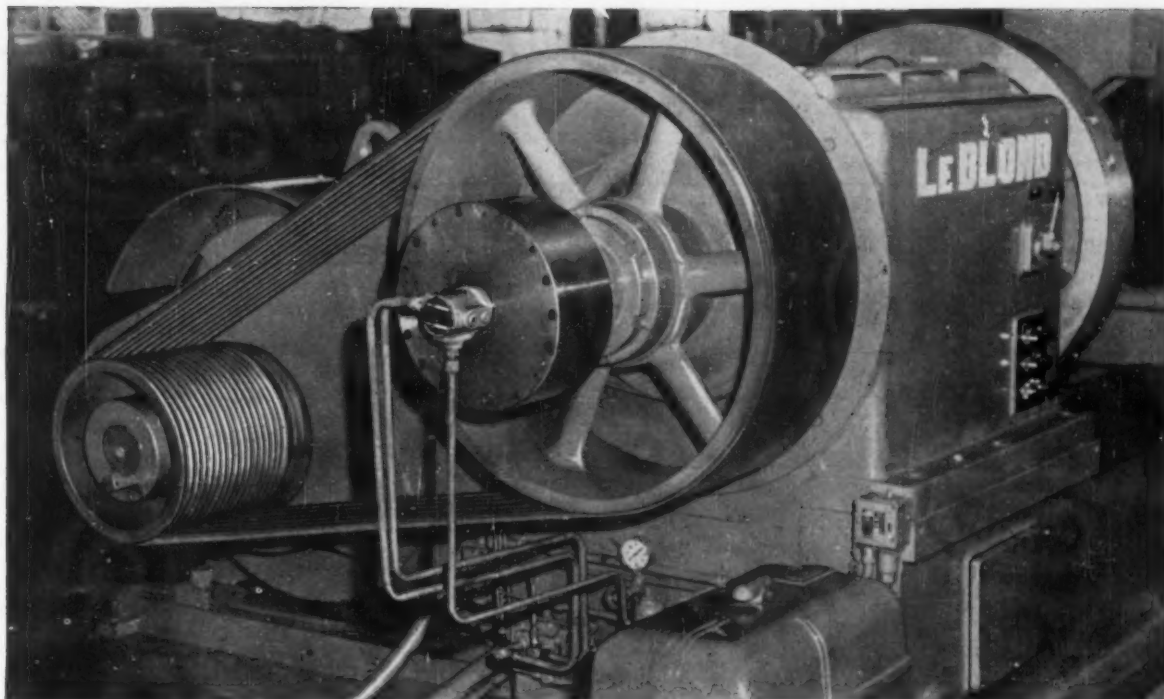
Domestically, its biggest impact is on steel—for steel scrap makes up the great bulk of the export total (5.3-million tons of last year's record figure). The decision finally sets a firm check on these steel scrap exports, a rein the industry has been urging for years. The curb on exports, too, may well mean additional scrap for domestic markets

—perhaps enough to cut today's rising scrap prices. This week the composite steel scrap price hit \$56.17 a ton (rebounding from a low of \$42.17 in late April).

Internationally, the new policy ends a complex tug of war between the U.S. and foreign buyers—principally Britain, Japan, and the European Coal & Steel Community—for increased allotments of scrap. Each foreign country was struggling to pull the rope in its direction. Though the decision was pretty much of a draw and foreign buyers balked at first, they now seem satisfied with the increase for all areas of about 12% over 1956. (Last year, Japan and the Coal & Steel Community each got about 1.2-million tons of steel scrap, and about 321,000 tons went to Britain.)

Steel's Case—Steelmen have long contended that scrap is too valuable a commodity to permit large-scale export. In the U.S., the average ratio in steel-making is around 47% scrap to 53% pig iron, they contend, and "that alone states the case for export curbs."

E. T. Weir, former National Steel Corp. chairman, and Ben Morcell, Jones & Laughlin Steel Corp. chairman, argued last year that it was pointless for steel companies to bring iron ore from foreign sources developed at enormous expense, when each two tons



NEW R/M Poly-V® Drive Solves Seven Major Power Transmission Problems!

Heavy duty drive problems can be accepted as necessary and costly features of power driven equipment—or they can be overcome! The difference is Poly-V® Drive... R/M's patented new concept in heavy duty power transmission. Here's how R/M Poly-V Drive helps eliminate seven major problems common to most conventional V-belt drive applications.

BELT MATCHING—Poly-V employs a single unit, V-ribbed endless belt running on specially designed sheaves—not a series of V-belts which vary in length. Belt length matching problems are completely eliminated!

SPEED RATIOS—Full contact between belt ribs and sheave grooves prevents belt "sinking" and uneven speeds... maintains constant speed ratios and effective pitch diameter from *no load* to *full load*!

SPACE REQUIREMENTS—Greater horsepower capacity per inch of sheave width with Poly-V delivers up to 50% more power in the *same* space as a multiple V-belt drive... or *equal* power in as little as $\frac{2}{3}$ the space!

*Poly-V is a registered Raybestos-Manhattan trademark.

DRIVE LIFE—Poly-V Drive has *twice* the contact area with only *half* the face pressure and that means *less wear, longer life* for both belt and sheaves!

STOCK INVENTORIES—Just *two* cross sections of Poly-V Belt meet *every* heavy duty power transmission requirement, as compared to *five* in the case of V-belts. With Poly-V you keep belt and sheave inventories to an all time low!

HEAT PROBLEMS—Because thinner Poly-V Belts have twice the ribbed area of V-belts exposed to the air, you are assured *cooler* operation and less strain on your equipment. And, of course, Poly-V Belt construction is heat resistant, oil-proof and non-spark!

EQUIPMENT DOWNTIME—Stronger, cooler running, longer lasting Poly-V Belt needs fewer tension adjustments after run-in... stays on the job longer to reduce downtime costs for replacements, too!

If any—or *all*—of these features can help improve your heavy duty power transmission drive performance and dependability, you owe it to yourself to investigate R/M Poly-V Drive. R/M engineers who developed it will be glad to assist you in determining the Poly-V Drive installation that will best solve your problems... give you "More Use per Dollar."

RM734

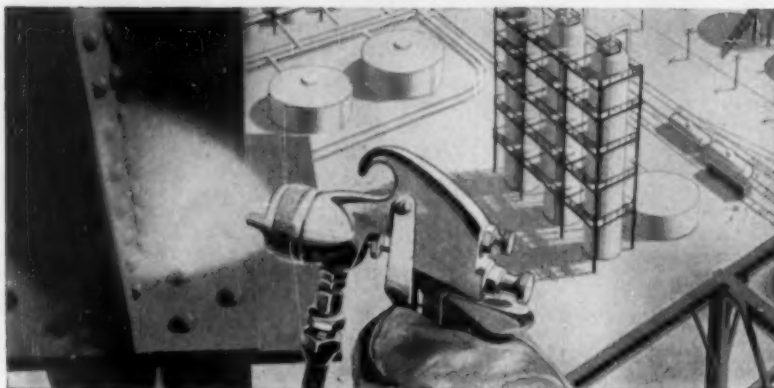
BELTS • HOSE • ROLL COVERINGS • TANK LININGS • INDUSTRIAL RUBBER SPECIALTIES



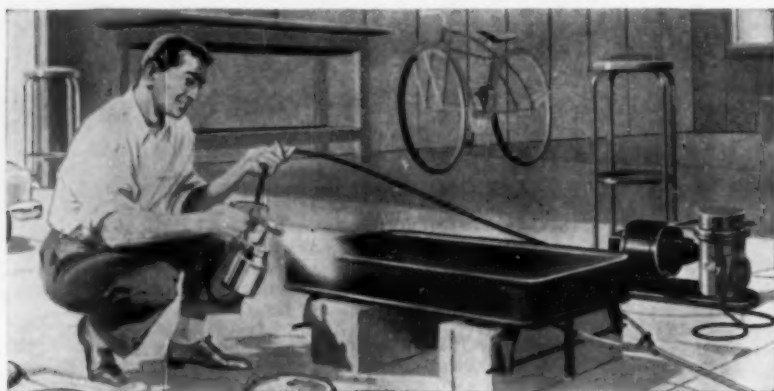
**MANHATTAN RUBBER DIVISION—PASSAIC, NEW JERSEY
RAYBESTOS-MANHATTAN, INC.**

Other R/M products: Abrasive and Diamond Wheels • Brake Blocks and Linings • Clutch Facings • Asbestos Textiles • Mechanical Packings • Engineered Plastics • Sintered Metal Products • Industrial Adhesives • Laundry Pads and Covers • Bowling Balls

Guns that shoot paint give enduring protection



cut costs for contractors and their customers



put the professional touch on paint jobs at home

Painting a refinery tower hundreds of feet above the earth, putting a new coat on your house, or refinishing a wagon or kitchen stool—spraying provides lasting protection and greater beauty.

Contractors prefer DeVilbiss spray—its speed cuts working time and costs—and there's assurance of more uniform film build. Following their lead, do-it-yourself enthusiasts are using DeVilbiss spray outfits around the home for easy-to-apply professional finishes that last for years!

Whatever you want to paint, you'll lower costs, get better coverage with greater ease—when you use versatile DeVilbiss equipment.



THE DEVILBISS COMPANY

Toledo 1, Ohio

Barrie, Ontario • London, England
Branch Offices in Principal Cities

of incoming ore was neutralized by a ton of outgoing scrap.

But until recent years, there seemed little need for curbs. Total export volume from 1945-49, for example, averaged a mere 180,000 tons a year. As steel capacity here and abroad flowered, however, the demand grew. Steel scrap exports jumped to 1.5-million tons in 1954, 4.5-million in 1955, 5.3-million last year. They were running at an annual rate above 7-million in May this year, when the Commerce Dept. called a halt to study the situation.

• Steps Toward Curb—Two years ago, when steel and scrap demand reached great heights, the cry over scrap exports had forced the Commerce Dept. to ask Battelle Memorial Institute to make a survey of future demand. The report, issued last winter, is now fuel for much of today's in-fighting. It found that scrap, generally, was abundant but expressed concern over the long-range supply of better grades (the grades the steel industry is now determined to keep from going abroad).

As a result, Commerce in February temporarily suspended export licenses while it discussed Japanese needs with a visiting Japanese trade mission. The State Dept. meanwhile talked over the export situation with British and European officials. Commerce's May freeze on all scrap exports followed. This required all exporters to hold shipments at 1956 levels.

Commerce's power to control scrap exports derives from the Export Control Act, under which exporters must file quarterly for licenses.

• Pleased—The steel industry, where the furor over scrap focuses most sharply, can only be pleased with the limited-increase plan finally adopted. It answers steel's call for a ceiling on exports of prime scrap grades, No. 1 and No. 2 heavy melting grades. Both consist principally of old locomotives, ship plates, and structural shapes; No. 1 must be $\frac{1}{4}$ in. thick, but No. 2 is thinner metal.

Early this week, however, the plan hadn't yet produced one of the benefits a steelmaker might look for—the easing of scrap prices. But the export curb should help steelmakers—particularly small, nonintegrated mills and foundries—to control prices better.

• Dealers' Role—Actually, the most immediate factor involved in the export curb, and the one in the domestic picture who might be hurt by the new policy, is the scrap dealer (BW—May 12 '56, p43). Scrap men divide roughly into three categories:

- Tens of thousands of small dealers who buy from peddlers, sell to larger yards.
- Medium-sized dealers, who buy



*Vehicles on a daily diet of low-speed driving
call for . . .*

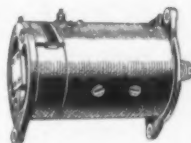
Delco-Remy Extra-Duty Electrical Equipment

to assure on-the-job dependability

Municipal sanitation trucks are the task forces in the battle to keep our communities clean and healthful. Because such a vehicle operates at low driving speeds, and stops often with the engine idling, it must have a dependable charging system specially designed to operate under these conditions.

Delco-Remy extra-duty d.c. generators have proved their dependability time and time again in this service. They provide the extra output necessary to keep batteries charged under continuous low-speed-and-idle operation. With the *right* generator and matching Delco-Remy regulator, the battery is protected against excessive discharge and cycling effects, stays charged and lasts longer.

Both 6- and 12-volt generator application packages are available. Be sure to specify Delco-Remy extra-duty electrical equipment, including the new longer life Delco batteries, on the new vehicles you order, and when you re-equip present ones.



Model 1106986 is typical of several Delco-Remy d.c. generators which are specially suited for vehicles in low-speed-and-idle operation. This dependable 12-volt unit produces 20 amperes at engine idle, with maximum output of 50 amperes at about 20 mph.

GENERAL MOTORS LEADS THE WAY—STARTING WITH

Delco-Remy

ELECTRICAL SYSTEMS

DELCO-REMY • DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA

Now, a gas* truck that does more
work on 25% to 30% less gas

Automatic DYNAMOTIVE



***Gas-driven generator powers direct-drive electric motor...
no clutch...no torque converter...no fluid coupling
...no transmission whatsoever**

The secret of Automatic (Series GLF) DYNAMOTIVE'S proved superior performance lies in its utter simplicity... an engine-driven variable voltage generator supplies electrical power to the drive motor direct-coupled to the drive axle. This proved power train *without gears* eliminates slippage and power loss through heat build up. At the same time, stresses on the engine are reduced, greatly increasing engine life. Truck down time is further reduced by the elimination of hundreds of moving parts found in conventional transmission and torque converter drives. Additional gas mileage is achieved by the inherent over-drive and torque multiplying features of the electric power train.

But only by seeing it at work can you realize how many and how important DYNAMOTIVE'S advantages really are. To name only a few:

Positive Inching Control...precise spotting gives faster, safer handling of loads.

Job Adjustable...directional control can be adjusted...on the job...for instant power or cushion-smooth takeoff.

Tilt and Lift Controls...optional for foot or fingertip operation.

Full Width Posture Seat...accessible from either side...reduces driver fatigue.

Visibility...high visibility of fork position throughout lifting range.

Safety...Dynamotives are listed by Underwriters' Laboratories Inc., and Factory Mutual Laboratories.

Capacities: 4,000 to 10,000 lbs. with solid tires...4,000 and 6,000 lbs. with pneumatics. Tractors available in 2,500 and 3,500 lbs. draw bar pull.

But see for yourself. Ask for a demonstration, and for complete specifications plus case histories of installations similar to your own. No obligation...write today.

Factory service available in over 100 cities.

Automatic

Dept. H-7, 93 West 87th Street,
Chicago 20, Illinois

from small ones, sell to large dealers.

• Large dealers or brokers, who sell to steel mills and abroad.

Of some 1,400 major scrap dealers registered with the Iron & Steel Scrap Institute, only about 45 are in the export business. In good times, their business is profitable; one exporter reckons he makes about \$2 to \$3 a ton, says the figure will be closer to \$5 a ton for larger companies. But it's also a highly unpredictable and competitive trade.

Under the limited exports plan, dealers might get hurt if steel demand drifts down for the rest of the year, and scrap prices fall. Lower steel demand for scrap would lower scrap purchases, while the curb on exports forced additional scrap on the market, setting off a chain reaction of lower prices. Yet if steel regains strength and goes into another boom, scrap prices could soar.

The dealers challenge any curbs on scrap exports as long as iron ore, pig iron, and finished steel can be exported without limits. They contend there's a huge reservoir of scrap in the U.S., enough for all emergencies.

• **Family Squabble**—The dealers aren't complaining too much about the latest curb, however. One reason is that they can't beef too loudly in the face of rising scrap prices. But there's another reason: Dealers are too busy with an intra-industry feud with Luria Bros. & Co., Inc., the biggest scrap exporters anywhere and a major factor in the U.S. market.

Small scrap exporters appearing before the House Small Business Committee have charged that Luria Bros. is squeezing them out of the European Coal & Steel Community market. They complain that the Community's purchasing office has turned down offers of cheap, good quality scrap while buying from Luria at higher prices.

One exporter claimed Luria made 85% of last year's scrap sales to the European Community, 40% of those to Japan, and about 50% of domestic sales. He charged it had achieved this dominance by such methods as buying competitors and circulation of rumors and threats against foreign consumers buying from other U.S. sources.

Luria is a wholly owned subsidiary of Ogden Corp., a holding company. Ralph Ablon, head of Luria, will say only that the company's testimony before the Federal Trade Commission in a pending case covers any of "the matters referred to."

FTC charged Luria with monopolistic practices, including exclusive dealing agreements with suppliers and buyers. Luria denied any illegal exclusive dealing agreements, and also denied controlling or harassing its competitors. **END**



"Styrofoam® saved us approximately 8% on our insulation bill at Little Rock"—Kroger Company

"Styrofoam saved us approximately 8% on our insulation bill for our warehouse in Little Rock, Arkansas," reports Lee J. Gibbs, Kroger mechanical engineer. "In addition, it also maintains the required temperatures which preserve the various foods stored in our coolers and freezers."

"About 250,000 board feet of Styrofoam are also being used in the new Kroger plant under construction in Shreveport,

Louisiana. Seven banana-ripening rooms, an egg cooler, a cheese cooler, two produce coolers and three freezer rooms will all be insulated with Styrofoam."

Mr. Gibbs speaks from experience. Kroger first used Styrofoam for insulation 4 years ago. For more information about this outstanding insulation, write THE DOW CHEMICAL COMPANY, Midland, Michigan, Department PL1709V.

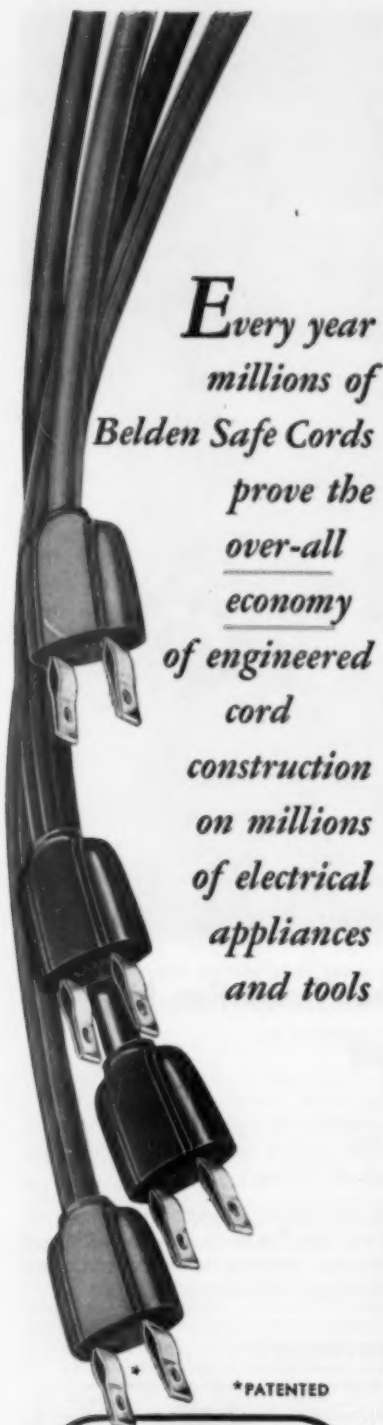
CHECK THIS EXCLUSIVE COMBINATION OF PROPERTIES

STYROFOAM® FIRST IN PLASTIC FOAM INSULATION	Insulations	Low "k" factor	Superior water resistance	High compressive strength	Light weight	Superior resistance to rot and vermin	Easy handling and fabrication	Low-cost installation	Lowest cost per year service
	STYROFOAM	•	•	•	•	•	•	•	•
	A		•	•		•			
	B	•			•			•	
	C	•		•					

Styrofoam is a registered trademark of The Dow Chemical Company.

YOU CAN DEPEND ON

DOW



*Every year
millions of
Belden Safe Cords
prove the
over-all
economy
of engineered
cord
construction
on millions
of electrical
appliances
and tools*

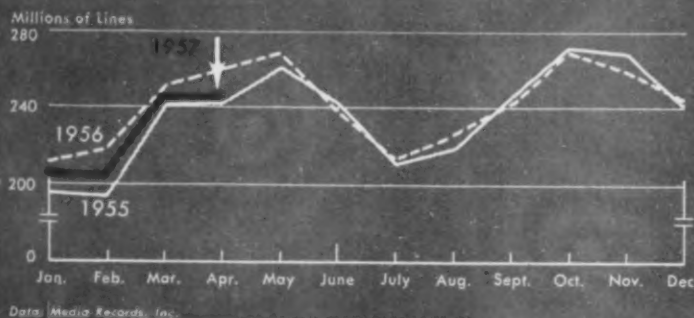
*PATENTED

Belden
WIREMAKER FOR INDUSTRY
SINCE 1902
CHICAGO

Magnet Wire • Lead Wire • Power
Supply Cords, Cord Sets and Portable
Cord • Aircraft Wires • Welding
Cable • Electrical Household Cords •
Electronic Wires • Automotive Wire
and Cable

CHARTS OF THE WEEK

Newspaper Advertising



Behind Last Year's Pace

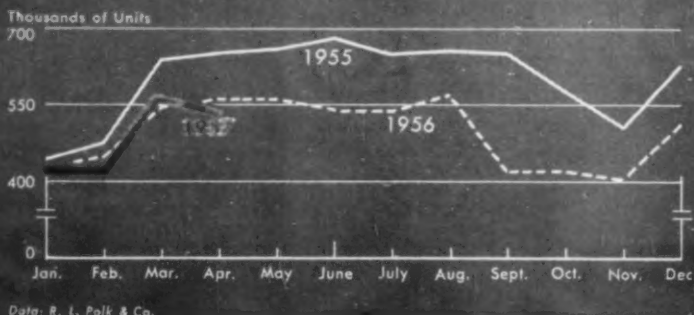
Newspaper advertising lineage in April fell 6% below April, 1956, causing the total for the first four months of this year to lag 3.2% behind the comparable year-ago period. The figures are based on a survey of 52 cities compiled by Media Records, Inc.

The principal reason for the sharp decline in April advertising was the fact the 1957 month included four Sundays, compared with five in April, 1956. Since September, 1956, however, every month except one has trailed the year-earlier month. December, 1956, was the exception, when a 0.2%

gain was registered. For the eight months since last September, total newspaper advertising lineage was 2.1% below a year ago.

In April, automotive advertising was 12.1% higher than in April, 1956, reversing a 12-month trend of decline. The only other category to show an increase in April was financial—up 7.8% from a year earlier. For the first four months of the year, financial advertising was up 8.6% from the similar period a year ago. All other categories fell below 1956 in the first four months' comparison.

New Auto Registrations



Neck and Neck With Last Year

Registrations of new passenger cars in April totaled 549,000 units—down from 573,000 in March and 564,000 in April, 1956. This brought the total for the first four months of 1957 to

1,997,508—neck and neck with the 1,988,696 registered in the comparable period a year ago. However, after allowing for registration of new foreign cars, the four months' total for U.S.

"Reports late again! Payrolls. Invoices.

All our statistical data! We'd better get



Burroughs Calculators and get 'em

fast.



With those instant-

action keys

and those simplified



keyboards, the girls would make

these deadlines in a breeze!"

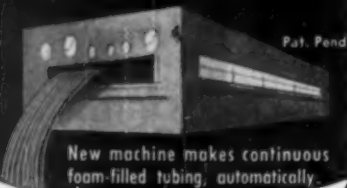
There's a Burroughs Calculator just right for your high-volume figuring. Demonstration? Call our nearest branch. Burroughs Corporation, Detroit 32, Michigan.



NEW PRODUCTS

With Opportunities

Foamedge products offer new comfort, convenience, economy and safety. More coming.



New machine makes continuous foam-filled tubing, automatically.

FOAMEDGE

VINYL COVERED POLYURETHANE FOAM
TRADE MARK

**AUTOMOTIVE
WIND SEAL**
Modern car
improvement

**WEATHER
STRIPPING**

**FURNITURE
PIPING**
Wears better.
Easy to use.

**REFRIGERATOR
DOOR SEALS**

**TRUCK BODY
DUST-HEAT
SEALS**
Many in use.

**OVERHEAD
GARAGE DOOR
BUMPER-SEAL**

WANTED!

- Reliable foreign manufacturers wanted to make Foamedge under license.
- Manufacturer's representatives wanted for Foamedge products, in a few areas.

Write for details

STERLING ALDERFER CO.

3950 Granger Rd., Akron 13, Ohio

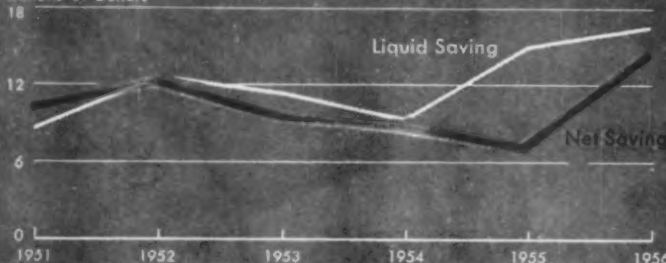
makes falls some 14,000 units behind the year-ago period.

Ward's Automotive Reports estimates that May sales approximately equaled production during the month. As a result, dealer inventories were estimated at about the same figure on June

1 as they were a month earlier. But when you consider stocks in relation to the present rate of sales, the number of days' supply this June is higher than a year ago—indicating a greater pressure on dealers and a threat to profit margins, says Ward's.

Saving by Individuals

Billions of Dollars



Data: Securities and Exchange Commission.

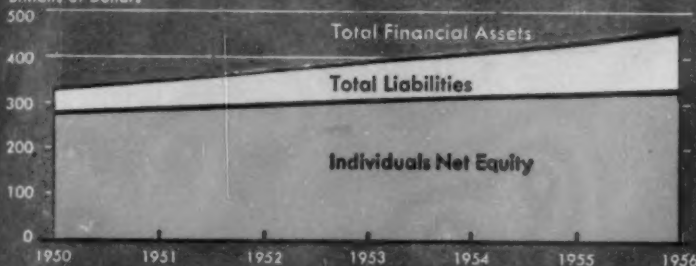
Putting More Away

Last year, individuals added more than ever before to their liquid savings—currency, bank deposits, savings and loan association shares, and securities. Individuals' saving for the year hit \$16.8-billion, a postwar high. After adding the increase in private and government insurance and pension reserves

and deducting the increase in individuals' debt—mortgage debt and consumer indebtedness—net saving came to \$14.6-billion, also a postwar high. That's almost double 1955's net saving. In 1955, individuals added \$18-billion to their debt, which meant a net addition to saving of only \$7.6-billion.

Individuals' Assets & Liabilities

Billions of Dollars



Data: Securities and Exchange Commission.

People Are Worth More

Total financial assets of individuals climbed to \$460.4-billion at the end of 1956—a rise of 5.6% from the previous year. These assets consist of currency and deposits, savings and loan association shares, government securities, private and government insurance, and

pension reserves. Individuals' liabilities grew fast, too; from 1955 to 1956 they were up \$13.6-billion, or 12%. But after deducting liabilities from financial assets, the net equity of individuals stood at \$350.4-billion—up \$11-billion, or 3.4%.



DETROIT BROACH & MACHINE CO., PLANT and OFFICES, Rochester, Michigan Architectural concept by Sture Frölen, Stockholm, Sweden; all units but one engineered and constructed by CUNNINGHAM-LIMP COMPANY.

**THESE SERVICES WILL PAY OFF FOR YOU
USE BUT ONE OR ALL**

- * Engineering analysis and reports
- * Site-selection and development
- * Plant layout and processing procedures
- * In-plant and out-plant materials handling
- * Equipment purchase and installation
- * Building design and engineering
- * Building construction, including:
 - Industrial plants
 - Research laboratories
 - Chemical process plants
 - TV and Radio facilities
 - Power plants
 - Commercial buildings
 - Railroad and Utility facilities

"If You Are Going To Build"—you can use our book covering this very subject to good advantage. You may find it dull reading, however, if you are not looking for cost-saving methods and for help and information on building-engineering and construction problems. Request it on your business card or letterhead, please. It will be sent by mail.

*The ultimate proof of customer satisfaction, especially in the building business, is repeat orders. Here are several of C/L's nationwide repeat customers. The complete list is available, of course, if you care to request it

Archer-Daniels-Midland Co.

Ashtabula, Ohio
Mankato, Minn.
Wyandotte, Mich.

Latrobe Steel Co.

Buffalo, N. Y.
Detroit, Mich.
Independence, Ohio

Ford Motor Company

Birmingham, Mich.
Indianapolis, Ind.
Livonia, Mich.
St. Louis, Mo.
Wayne, Mich.

Ex-Cell-O Corporation

Detroit, Mich.
Lima, Ohio

Storer Broadcasting Co.

Atlanta, Ga.
Birmingham, Ala.
Detroit, Mich.
Miami, Fla.

Sunshine Biscuits, Inc.

Detroit, Mich.
Grafton, Ohio
Jeffersonville, Ind.
Omaha, Nebr.
Pittsburgh, Pa.

Satisfaction after Satisfaction plus Satisfaction

An example of confidence in the engineering and construction services of Cunningham-Limp

This story is for you, only if you are planning to build in the future. Because your choice of a company to take over the complete engineering and construction responsibility is a major executive decision, its message should be of value.

Some years ago, the DETROIT BROACH & MACHINE CO. decided they must build the additional manufacturing and office space their phenomenal success was making necessary. With wise foresight they insured orderly, future expansion by securing a large enough site and by planning for an integrated operation—each unit to be constructed when needed. The first of these (1950) was not done by Cunningham-Limp. For the second one (1953), C/L was called in for both engineering and construction—and later in 1953 for the third—and for the fourth in 1956.

90% of C/L's volume comes from repeat orders

DETROIT BROACH & MACHINE CO. has pioneered many important broaching techniques and equipment. When they require additional capacity, it is believed they will call on us again. Satisfied with actual proof that they have received a full dollar's value for every dollar spent for construction, no company is likely to change construction firms. You wouldn't either—so when you are ready for that future building* of yours, make the correct decision by assigning the complete responsibility for designing, engineering and building to Cunningham-Limp.



Ask the owner on any project where you see this sign how they like the way Cunningham-Limp does business.

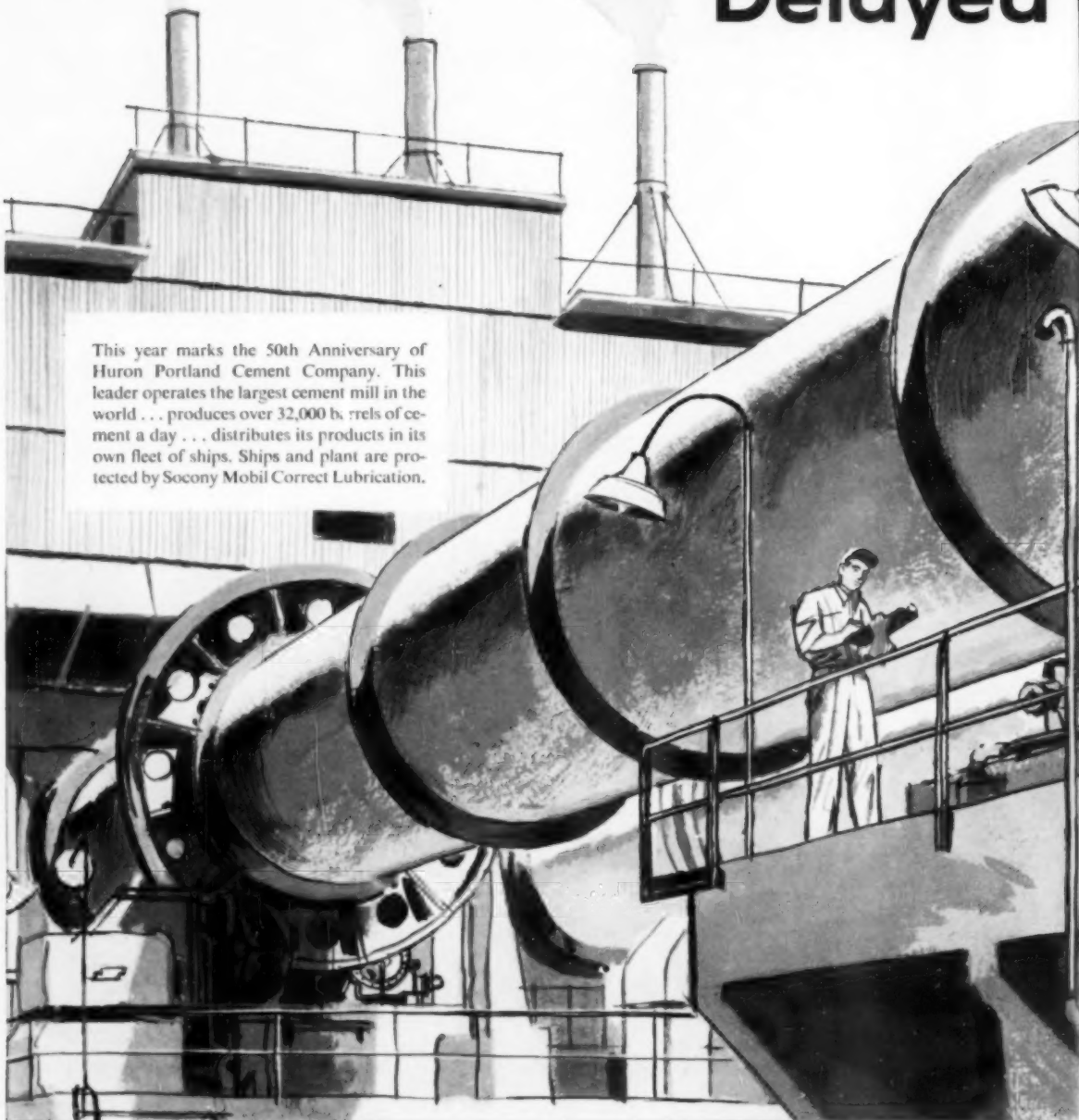
DETROIT 2, 3087-C W. GRAND BLVD. • Trinity 3-4000

INDIANAPOLIS, 7018 ENGLISH AVE. • FLEETWOOD 9-5566
KANSAS CITY, MO., 909 SCARRITT BLDG. • VICTOR 2-8791
ST. LOUIS 6, 316 LINDELL TRUST BLDG. • OLIVE 2-8200

also Cunningham-Limp Company Ltd., of Canada

Correct Lubrication in Action...

Girth Gear Replacement— Delayed

A detailed black and white illustration of a large industrial facility, identified as a cement mill. The scene features several large, horizontal cylindrical rollers or mills. A worker in a uniform and cap stands on a metal platform with railings, looking down at a clipboard or book. In the background, there are more industrial structures and three tall smokestacks emitting plumes of smoke into the sky. The overall style is that of a technical or industrial drawing.

This year marks the 50th Anniversary of Huron Portland Cement Company. This leader operates the largest cement mill in the world . . . produces over 32,000 barrels of cement a day . . . distributes its products in its own fleet of ships. Ships and plant are protected by Socony Mobil Correct Lubrication.



SOCONY MOBIL

Leader in Lubrication for over 91 years

in the **Cement Industry**

Expenditure of \$8,800 Indefinitely !

One of many maintenance savings made by the Huron Portland Cement Company with the help of Socony Mobil

Located at Alpena, Michigan, is the world's largest single cement plant. To assure its continuous operation at minimum maintenance cost, Huron Portland Cement Company relies on a Socony Mobil Program of Correct Lubrication. Here's an example of this comprehensive service in action:

Problem: Pinion gears on four kilns were wearing excessively . . . so also were the huge girth gears. In time, girth-gear teeth became so roughened that new pinion gears would be quickly damaged when installed. How to avoid the costly job of replacing the

girth gears was the problem facing the Company.

Solution: After consultation with Huron Portland personnel, Mobil engineers recommended a special Mobil lubricant compound that cut wear on pinion gears . . . at the same time helped smooth up the girth-gear teeth. Result—girth-gear life was extended indefinitely . . . \$8,800 saved on just one kiln.

Service like this has helped this cement company continually improve profits through increased production . . . reduced maintenance costs. Perhaps it can do the same for your plant.

Other ways Mobil Correct Lubrication cut costs



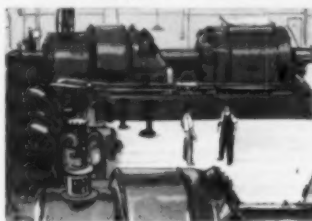
Exceptionally long product life—4 Allis-Chalmers generators supply power for entire Huron Portland Cement plant. Same fill of Mobil D.T.E. oil has been in continuous use in one of these generators for over ten years. Units have not shut down once due to lubrication failure. In fact, latest samples show oil to be in "like new" condition . . . good for many more years.

Gear maintenance cost cut—Mobil engineers surveyed planetary-type gear sets that drive mills, kilns and other

machinery. As a result, they recommended a single wide-range lubricant in place of three products formerly used. Qualities of this Mobil product eliminated periodic need to clean sludge from gear cases . . . extended oil fill life 100% . . . produced savings in storage and handling.

Engineering assistance cut downtime—Mobil engineers cooperated with Huron Portland in investigating cause of bearing and tooth failures on gear reducers. It was found that gears had been purchased from different suppliers and that tooth sizes varied. Mobil suggested purchasing new gears from one supplier. Mobil engineers also suggested that grooving in pressure area of split-bushing bearings be removed. When this was done, gear reducer trouble ceased . . . downtime was sharply cut.

Complete Mobil service—Supplying Huron Portland with top-quality lubricants is only a part of the comprehensive Mobil program. Mobil field personnel, engineers and sales representatives work closely with Huron Portland's maintenance personnel. They conduct in-plant training courses, make analyses of products in use, submit periodic reports on benefits achieved. No wonder records show a continual reduction in maintenance costs over the years.



Correct Lubrication

**A proved program to reduce
maintenance costs**

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In Business Abroad

• • •

Australian and Mexican Airlines

Win Some Space in the U.S. Skies

Foreign airlines are gradually winning more routes into and across the U.S.

Two months ago KLM Royal Dutch Airlines won its fight for new routes here. This week two other carriers were joining the fun—in the wake of these developments:

Australia's **Qantas Empire Airways, Ltd.** wants to fly from San Francisco—present terminal stop in the U.S.—to New York and on to London. That would give it a round-the-world route.

During the past year Qantas has lost money on its Southeast Asia and Middle East routes because of Suez and other crises. Since then, it has cleared the way for getting the San Francisco-New York leg by explaining its troubles carefully to U.S. airlines.

Now the Civil Aeronautics Board and State Dept. have conditionally O.K.'d the Qantas route—pending agreement on what Australia and New Zealand will give.

Mexico's **Aerovias de Mexico**, controlled by former Pres. Miguel Aleman, has won—as expected—the highly prized Mexico City-New York nonstop route. Until recently, Air France was the only carrier running nonstop flights on this lucrative route. But the bilateral agreement, signed in March after a 10-year dispute, opened up the New York route to one Mexican and one U.S. carrier. The U.S. has not yet decided which U.S. carrier will fly the New York route.

• • •

Stanvac's Contribution to Indonesia

Studied, Along With Its Troubles

This week the National Planning Assn. released one more of its studies on the contribution of American investment to foreign economies. This time NPA, with the help of Massachusetts Institute of Technology Center for International Studies, took up the activities of the Standard-Vacuum Oil Co. in Indonesia.

Stanvac's history in the East Indies is a long story of the trials and tribulations of overseas investment. The company had a long search before oil was found. Then came World War II and the destruction that followed it when the Indonesians revolted against the Dutch. When peace came, Stanvac was dealing with the newly independent, inexperienced Indonesian Republic.

Despite all these difficulties Stanvac made important contributions to the Indonesian economy at the same time that the company did a profitable business. It opened up whole new regions of the vast island of Sumatra, taught skills to Indonesian employees. The most important function of the company, so far as the Indonesians are concerned, is to provide earnings for the national economy—particularly foreign exchange.

The key to Stanvac's future in Indonesia—and that probably goes for its two competitors, BPM of the Royal

MORE NEWS ABOUT BUSINESS ABROAD ON:

- P. 126 Japan's New Co-Prosperity Pitch.
- P. 130 Poland Gets a Look at U.S. Goods.

Dutch Shell group, and California-Texas Oil Co.—is new concessions. Stanvac hasn't had any new properties since the Indonesian government suspended awarding new rights in 1951.

So despite the fact that Stanvac is now investing between \$70-million and \$80-million to modernize its facilities and exploit a Central Sumatran field, production is leveling off. This production is also having to meet rising domestic consumption which means less exports, less foreign exchange. There is also a strong possibility that the Indonesians are losing their "natural market" in Australia and India to Middle East oil competition.

• • •

International Finance Corp., Assailed

As Too Cautious, Makes First Investment

The International Finance Corp., the new agency for investing capital in underdeveloped countries, is making its first investment abroad. The investment will involve expansion of a West German company in Latin America.

The IFC was set up in July, 1956, as an offshoot of the World Bank. It is essentially a "venture capital" agency that will join hands with private companies or investors in starting and expanding industry in underdeveloped countries. So far, 49 countries have put up \$92.3-million—the U.S. contributing \$34-million. The money at present is mostly invested in U.S. government securities and short-term bonds.

Critics have said that IFC is venturing much too cautiously and that it should quit stalling. But IFC's president, Robert L. Garner, claims that the agency must pick its partners in financing very carefully. He says that since investors will examine IFC's first move closely, it had to be sure that its investment was a good one.

• • •

Japan to Help Finance Steel Mill

In Brazil; Shipbuilding an Angle

Japan has completed plans to finance and build a 500,000-ton steel mill in Brazil, according to an agreement signed last week.

The \$161.4-million mill should begin partial production in three and a half years. Japanese industrialists and banks will finance 75% of the \$100-million worth of machinery in the mill, 40% of the working capital.

The mill is one phase of Brazil's steel program that aims at doubling present output of 1.3-million tons by 1961. Some of the steel will go to the booming auto-truck industry in which U.S. manufacturers have been investing big sums. Japanese industrialists also see possibilities in forming a Brazilian shipbuilding company that would use steel plate produced by the mill.



JAPAN'S PRIME MINISTER, Nobusuke Kishi, is visiting Washington to explain . . .

Japan's Bid to Regain Its Place in the Sun

This week, Japan's prime minister, Nobusuke Kishi (above) arrived for a state visit in the U.S. that he said would inaugurate a new era of friendly Japanese-American relations. He declared it would be based on acceptance of Japan as a full-fledged, independent world power. In recent months, it has become clear that Japan again has resumed its old position as a leading power of Asia—the only country in the region with an industrial economy. Kishi's aim is to set about peacefully developing, through trade and commerce, the East Asia Co-Prosperity

that Japan's warlords unsuccessfully attempted to achieve through aggression in World War II.

• **Transformation**—Kishi, himself, is a fitting symbol of Japanese postwar rehabilitation. Only a dozen years ago he stood before a Tokyo Occupation tribunal accused of the crime of planning aggressive war. This week Kishi was getting a ticker-tape reception in New York.

Kishi's transformation from fascist war criminal to democratic prime minister parallels the political and economic turnabout of his country. When the

war ended, Japan was in ruins. Its industry was in a state of collapse, its morale at rock-bottom. And Japan's future looked even bleaker. Asian nations on whom it had depended for trade and livelihood vowed revenge for the cruelties inflicted by Japanese armies. Japan's Western conquerors dubiously undertook the gigantic task of making over its political and social institutions along Western lines.

Yet today that renaissance has come about. Japan's economy is probably stronger than ever before. Living standards, though low by any Western standards, have reached a new peak. And all of this has been achieved under a parliamentary regime.

Moreover, symbolic of Japan's resumption of the role of a leader of Asia, Kishi was welcomed on his recent tour through Southeast Asia. Former Asian enemies now seem ready to forgive and forget Japan's war crimes and to work—at least to some degree—with Japan for Asian economic development.

• **Kishi's Aims**—Kishi hopes to drive this point home during talks with Pres. Eisenhower and other U.S. leaders. He wants to cast off the last shackles of American occupation by getting the U.S. to make two further concessions:

- Removal—or disguising—of the remaining traces of U.S. military domination.
- Aid in tightening Japan's economic ties with the rest of Asia.

I. A Skilled Politician

Kishi is a realistic man. He doesn't expect that Washington will act immediately on any of his proposals. But he does hope to lay the groundwork for future Japanese-American discussions—and to return home with some kind of trophy for the Japanese voter.

Actually, American observers in Tokyo believe that a better man couldn't have been found to sell Japan's point of view. For whatever Kishi may lack in terms of flamboyant personality, he makes up for in skill as a politician.

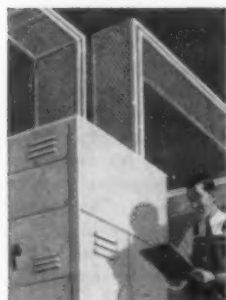
Since taking over the premiership in March from ailing Tanzan Ishibashi, Kishi has done a magnificent job of unifying the faction-ridden conservative Liberal-Democratic party. Kishi enjoys excellent relations with the Diet—a parliament that only a few months before had seen members stage riots on the floor.

• **Horse Sense**—Much of this new co-operation can be traced directly to Kishi's political horse sense: He almost never gets ruffled, never says the wrong thing, usually avoids pitfalls with vague but appropriate statements.

When Kishi came to power, his name—which means "river bank" in



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A section of the efficient Bull-Dog power network at Hallmark Cards—aluminum Lo-X® duct and switchboard.

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Breakdown of the Rexair showing water pan at left. Also closeup of interior of Rexair Cleaner with Rubatex gasket in place around motor base.



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Its closed cellular structure, composed of millions of individual nitrogen-filled cells, permanently sealed with tough, live rubber, gives Rubatex unusual resilience and unequalled ability to repel moisture indefinitely and shut out oxygen, dust and dirt even at cut edges.

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"... the simple fact that U.S. troops walk their streets irritates the Japanese ..."

STORY starts on p. 126

Japanese—was the subject of a pun. It was said he was trying to please both sides of the political river. His wartime activities are taken as proof.

Kishi was a close associate of Tojo, serving first as vice minister of industry for Manchuria, then as minister of trade and industry. But Kishi was only a bureaucrat who entered the cabinet strictly as a technical expert. Moreover, he broke with Tojo in 1943. During his imprisonment under the U.S. Occupation, Kishi vowed to go the democratic way and everything in his postwar record indicates he has.

• **Popularity**—His rare—for a Japanese politician—appreciation of what might be called public relations has quieted his critics, given him a growing popularity, and perhaps given him self-confidence, as well. His attraction, apparently, is that he represents the common man's taste and aspirations.

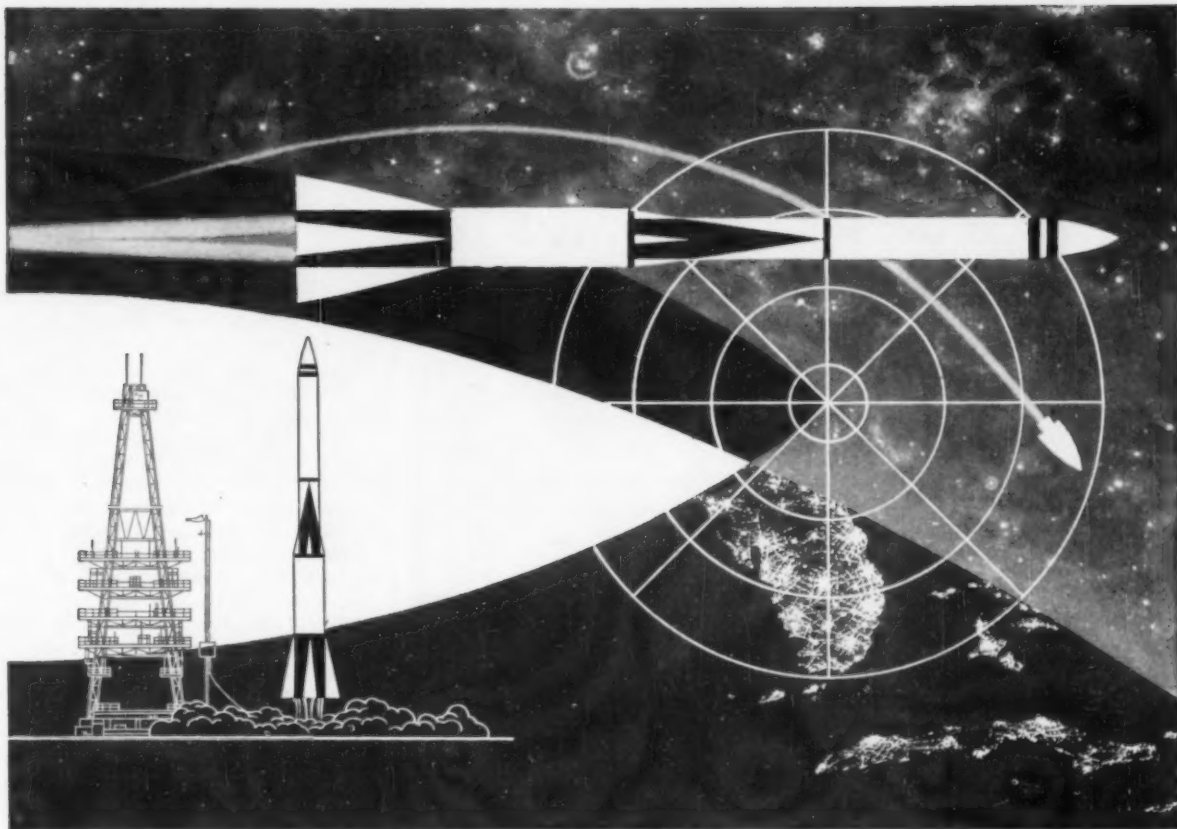
II. Japan's Goals

One of the most important questions Kishi will broach during his current Washington visit is the U.S.-Japanese Security Treaty and the Administrative Agreement that established the basis of the post-occupation stationing of American troops in Japan. Japanese public opinion is adamant that the treaty must be revised—and Kishi's Socialist opposition wants it abrogated altogether.

• **Girard Affair**—The issue has hit the headlines with the case of U.S. Army Specialist-Third-Class William S. Girard, charged with shooting a Japanese woman gathering empty cartridges on an American military firing range. The Administrative Agreement leaves some area of doubt as to whether U.S. military or Japanese courts have jurisdiction in such cases. But until Washington definitely decided that Girard should be tried by a Japanese court, the case engendered so much bitterness in Japan that anti-American feeling has probably hit a postwar high.

The bitterness has its roots in the war, of course. But it has burst forth now because of the realization among the Japanese that they are once again a world power to be reckoned with. The simple fact that U.S. troops walk their streets irritates the Japanese, reminds them of the humiliation of the Occupation.

• **Demands for Revision**—So politically potent an issue is this whole subject



An artist's conception of the launching of the missile, its guided flight, its track on a radarscope in its final stage.

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"... Kishi asks the U.S. to underwrite a vast Asian development fund . . ."

STORY starts on p. 126

that even pro-American Japanese politicians must pay at least lip-service to the need for revision of the agreements. The most radical ideas for revision call for Japanese jurisdiction over all crimes involving U.S. personnel and Japanese citizens, abolition of the stipulation that U.S. forces may be used to put down riots, and a general reduction of U.S. personnel and bases.

Still, most conservative leaders would settle for less. The reasons are clear: Stationing of U.S. troops in Japan has meant yearly expenditures of \$600-million, almost as much as the deficit between Japanese exports and imports in past years. Furthermore, as long as U.S. forces are available for the defense of Japan, the country can continue earmarking a minimum of its national budget.

Ironically, the U.S. has been pressuring the Japanese for an accelerated mobilization of Japanese armed forces that would relieve American forces stationed in Japan. Kishi, like the conservative prime ministers before him, has a convenient excuse for not doing this. The "MacArthur Constitution" that the Japanese wrote at the direction of the U.S. Occupation force forbids the country to have anything but light defense forces. And it takes a two-thirds vote of the parliament to amend the constitution. Since the Socialists oppose a military buildup, a change in the constitution is now impossible.

The question of Okinawa, psychologically linked to the Security Treaty, also will be brought up by Kishi. Kishi will probably ask for its return—although Japanese leaders are resigned to continued U.S. Occupation.

• **Economic Proposal**—Kishi also will ask the U.S. to underwrite a vast Asian development fund. Kishi will argue that using Japan's plant is the most efficient way to extend modern technology to the underdeveloped nations of Asia. Of course, this would also assure Japanese prosperity by harnessing Southeast Asia's markets for Japan's industry and assuring raw material sources.

Kishi understands that he won't have an easy time selling this kind of project to an Administration already having its hands full with the simple proposition of continuing foreign aid (page 28). Kishi's proposal was not even wholly acceptable to the nations of Southeast Asia. These countries are skeptical of Japan's ability to deliver capital goods at prices competitive with their traditional European suppliers and are sus-



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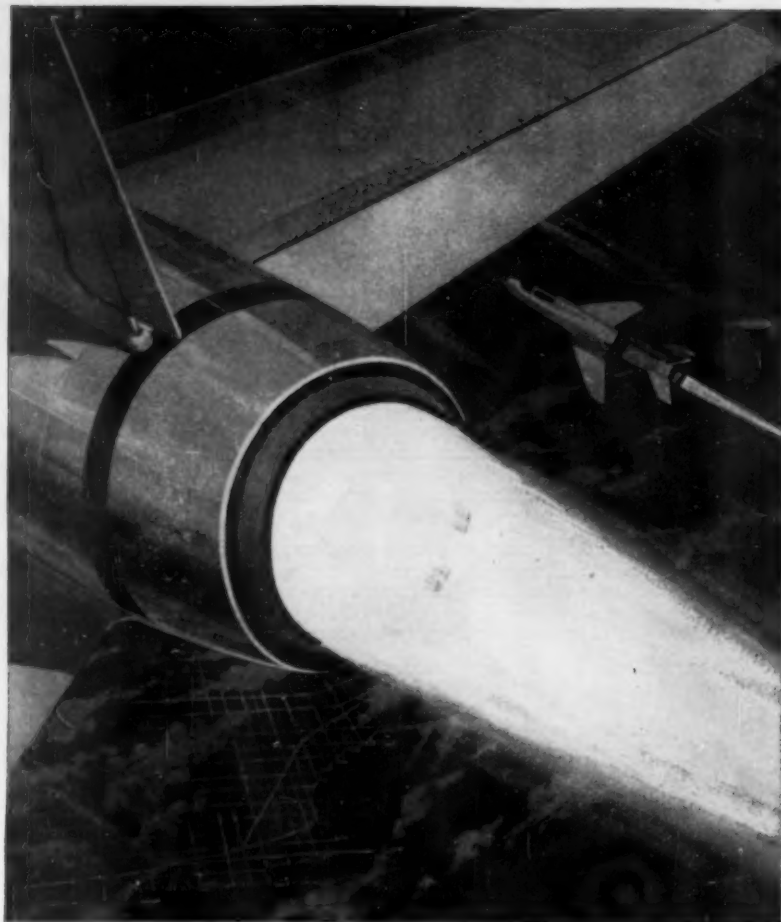
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New SPS 1200°F locknut secures jet hot spots



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The new SPS 119 FW high-temperature locknut was designed to end these problems. Made of corrosion and heat-resistant alloy, and silver plated, it keeps its tensile strength in temperatures up to 1200°F. It withstands hundreds of cycles of heating and cooling without galling or seizing on mating threads.

The 119 FW locknut is another product of the constant SPS research into ways of making threaded fasteners that are stronger, safer, lighter, easier to use. Call on us for assistance with your threaded fastener problems. STANDARD PRESSED STEEL CO., Jenkintown 57, Pa.

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picious of Japan's motives. Yet Kishi feels Southeast Asians are sympathetic.

• **Trade With China**—Kishi's attempts to increase Asian trade aren't limited to the non-Communist countries at the southern end of the continent. Communist China was once Japan's single biggest customer. Kishi will try to persuade Washington to ease restrictions against trading with Peking now that Britain has done so unilaterally (BW—Jun. 8 '57, p117).

Japanese businessmen are delighted by the British move. But many government officials fear their exporters won't be able to compete with West Europeans for the mainland China markets. Moreover, Japanese exports are bound to be limited since Red China can't or isn't willing to export the goods Tokyo would like to buy. Japanese-Red China trade already is running up a deficit for Peking.

III. Problems at Home

Prewar Japan, with its smaller population and its captured markets and resources on the Asian mainland, could afford to live half in its feudal past, half in the 20th Century. It can't today. Its industry must be modernized if its economy is to meet world competition and the shocks that might come from a world recession.

That's why modernization and productivity campaigns in industry are a cardinal point in Kishi's Liberal-Democratic program.

But putting through such a program runs into many bottlenecks. Not the least is the Socialist opposition. The Socialists oppose any program that seems to create short-term unemployment. Still, fundamentally, the two parties look at domestic problems pretty much the same way. It's hard, for example, to tell where traditional Japanese paternalism leaves off and where modern welfare state ideas begin. And both parties are committed to a welfare state. As a matter of fact, Kishi's party recently rammed a social security program through the parliament that left the Socialists gasping. And the tax reduction that his party has sponsored has made the Liberal-Democrats popular with businessmen, small shopkeepers, and the farmer.

• **Outlook**—Actually most observers believe there isn't too much likelihood of the Socialists coming to power soon. Their militant trade unionism has scared off the traditionally conservative Japanese voter.

Kishi has capitalized on the drift of the floating vote away from the Socialists by moving his domestic policy further to the left. Thus, Tokyo observers believe, Kishi may have several years for his program of fulfilling Japan's wartime aims in a peaceful way. **END**

THE STORY BEHIND THE STORY



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Safe, precise control of our fast-growing air and sea traffic is a top-priority project today. Development of CYTAC now promises to solve the problem.

This unique new Sperry hyperbolic system enables both long and short range aircraft as well as ocean liners to locate their exact position with unprecedented accuracy at all times. Its low-frequency signal reaches 1500 miles over land, 2000 miles over water.

Another key feature of CYTAC is its

ability to operate accurately at low altitudes. CYTAC signals simply flow around buildings and other obstacles which block signals from high-frequency line-of-sight systems now in use.

Equally significant is CYTAC's low cost in providing transmitter coverage. To set up a 24-hour all-weather, air-sea navigation system blanketing the U. S. and adjacent sea lanes requires erection of only 15 transmitters.

Called the most important radio navi-

gation development of the postwar era, CYTAC's capabilities have been demonstrated by an extensive field test program. Like the Mark 3 Radar for ships and the SP-30 Flight Control System for next year's jetliners, CYTAC is another Sperry contribution to safer, faster travel.

SPERRY *GYROSCOPE COMPANY*
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SHIPS AT SEA, even in mid-ocean, can fix position exactly with CYTAC by long-range signals transmitted from shore. CYTAC operates continuously, night and day, in all weather.

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CATALOGUES of U. S. mail order houses, with bewildering variety of wares, were so fascinating to Poles surging through U. S. pavilion at Poznan that several were taken.



PREMIER Jozef Cyrankiewicz (left), on a personal visit to the U. S. displays, shook hands cordially with Harrison T. McClung (center) of Commerce Dept., the exhibit sponsor.

FASHIONS from U. S. creators were modeled by Polish women. Enthusiastic visitors at the trade fair fingered the material and goggled at the styles.

Poland Samples U. S. Goods

As a reward for signs of independence from Moscow, the U. S. has given Poland economic aid—and, in its Poznan exhibit, an exciting look at a free economy.

"YOU'VE APPEARED—at last," said a Polish worker in Poznan last week. "Don't disappear again."

This comment is typical of the excitement—and hope—generated in Poland over the past few weeks by the U. S. government's official participation in the International Trade Fair in Poznan.

The Poznan exhibit (pictures) follows close on the heels of the U. S. government's economic aid agreement with Poland. This agreement, signed two weeks ago, calls for \$95-million worth of loans and credits that will help Poland cope with its long-standing economic crisis. The money will pay

for purchases of much-needed machinery and agricultural commodities.

It's apparent that in these twin moves—the aid agreement and the Poznan exhibit—there's more than meets the eye. The U. S. government is trying to show the other Communist-controlled countries in Eastern Europe that even a small degree of independence from Moscow brings rewards—in the form of financial help and political support.

• **New Direction**—Already, the Administration has made this point in its relations with Communist Yugoslavia. Since 1948, Tito has led Yugoslavia through a zigzag course of "national Communism," somewhat independent of Moscow's dictates. This has paid off in sizable U. S. military and economic aid. Now, with its own unique brand of "national Communism," Poland is beginning to receive the same kind of U. S. support.

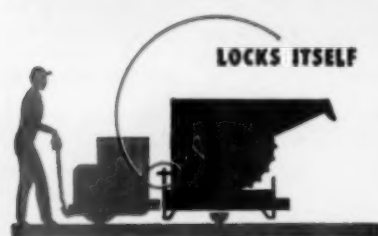
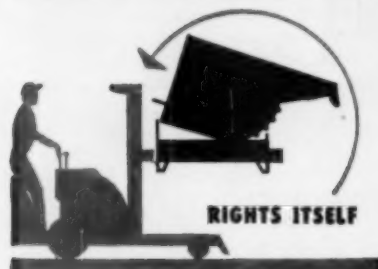
Last year the U. S. did not participate

in the Poznan fair. But a handful of American businessmen dropped in to look around. Soon, they saw much more than exhibits in the industrial and university city: Workers staged mass demonstrations against the Soviet-dominated government of Poland.

This year, with a new Polish government in the driver's seat, the big international fair has a completely different atmosphere. Foreign exhibits from 29 countries take up three-quarters of the space—last year, they only took half. Russia has cut down the number of exhibits in its huge pavilion, handed over the extra space to Communist Czechoslovakia.

• **Made in U. S.A.**—The biggest change of all is the imposing steel tower—initialed with huge letters "U.S.A."—that you see in the distance from the fair's entrance gate. The tower marks a dramatic exhibit of U. S. equipment and merchandise representing the





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AUTOMOBILE drew crowd eager to inspect Detroit's 1957 product, complete with such refinements as push-button windows. Commerce Dept. spent \$400,000 to set up displays.



MODEL HOME gave long lines of Poles a glimpse of U. S. home life. House was completely furnished, even with a power mower for lawn, and visitors stared with wide eyes.

(Story starts on page 134)

products of over 300 companies. Altogether, it cost the Dept. of Commerce's Office of International Trade Fairs some \$400,000 to set up this showcase of products.

There are no atomic displays, no gigantic machines—nothing that would impress visitors by sheer size or complexity. The U. S. display includes ladies' hats, tractors, 1957 cars, TV sets, and up-to-date kitchen equipment. It shows Polish people the kinds of goods that Americans can buy—a sort of window shopper's paradise. It points up what a free economy—as contrasted with a Communist state-planned economy—can produce for the mass of consumers.

As U. S. planners had hoped, this exhibit showing the "average" things Americans use overwhelmed the thousands of Polish visitors. Except for a few with black-market dollars, they could not afford to buy the products. But at least they could imagine what the future might hold for them—if Poland can rehabilitate its depressed economy.

• Remember Poznan—The fair is a

reminder of what has happened in Poland over the past year. On June 28 last year, while the annual fair was in full swing, workers began rioting in the streets to protest the government's failure to maintain wage levels at Poznan's big locomotive works. Polish Premier Jozef Cyrankiewicz blamed the uprising on Western agents. But this coverup didn't succeed. Tension over inflation and Soviet domination mounted steadily.

In October, the chain reaction of protest led to the overthrow of the Stalinist-controlled government. Wladyslaw Gomulka, elevated to head the Polish United Workers' (Communist) Party, took over the reins of government. Since then, he has been walking a tightrope. He has tried to keep a balance between the still strong pro-Soviet Communists and the Communists who would like more freedom and closer contacts with the West.

Despite the changeover at the top, Poland remains Communist—there's no denying that. But the country is trying to make a success of its own form of "national Communism". It wants a somewhat free hand in setting its own

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units for sure. For our operation, ROADRANGER Transmissions, cab-over-engine tractors and big engines are the answer. Our maintenance superintendent credits the Fuller ROADRANGER Transmission with increased efficiency and with decreased maintenance cost."

Yule's latest fleet additions include 15 International C.O.E. Tractors, all equipped with Fuller 8-speed ROADRANGER Transmissions. The same outstanding ROADRANGER advantages . . . low maintenance cost—easier, quicker shifts—higher average road speeds—greater fuel economy—

38% steps between ratios keep engines operating in the high rpm range—less driver fatigue—space-and-weight saving economies . . . can be applied to *your* operation.

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Rockwell Report

by W. F. ROCKWELL, JR.

President

Rockwell Manufacturing Company



IT is surprising how often our people are asked, "How do you decide whether or not to acquire a company? What are the most important considerations for you?"

Naturally there are many considerations, all of them important, and any decision must be based on balancing all of them. But some require more study than others and so, for us, are perhaps the most important. These are marketing considerations.

We do not acquire a business with the intention either of selling or liquidating it, but because we believe we can market its products efficiently.

That is why our marketing heads play an important role in determining the direction and extent of our diversification. In considering the possible purchase of a business, for instance, they are in on every step of the negotiation. It is their responsibility to appraise the prospective acquisition's products, its present and potential markets, and its sales organization. In addition they must appraise our selling organization in relation to the possible new products and markets.

But only half of our diversification has come through acquiring businesses. The other half has come out of our own research and development, and here marketing people play an important part, too.

Sales Management's responsibilities in our overall diversification program might be summarized like this: To maintain good communications with field people in order to keep the home office informed of customer desires; to suggest needs for new products or product improvements to research and development; to recommend entire product lines or bring to management's attention companies to be analyzed.

And most important: To participate in final decisions to enter new fields. We believe that on efficient marketing—more than on any other one factor—depends our long range future as a company.

* * *

You may have seen news announcements recently of our latest acquisition: Republic Flow Meters Company, a pioneer in applying electronics to instrumentation. Republic manufactures electronic and pneumatic instruments and process control equipment for automatic measurement and control of flow. This substantial participation in the electronics field will better enable us to work out problems of automation, through the application of automatic controls, for our Nordstrom and Edward valve customers.

* * *

Although, strictly speaking, research on completely new products falls mainly within the province of our central research and development staff, we encourage people in our plant organizations to think along the same lines. In the past few years a number of new products introduced by us have been completely developed by plant personnel.

* * *

Visitors to our laboratories are sometimes surprised that we, who do not produce metals, devote so much attention to metallurgical research. The reason, of course, is to meet the constantly changing needs of our customers as they are faced with new problems. Rockwell-Nordstrom valves, for instance, are made in an impressively long list of ferrous and non-ferrous alloys, and the list is growing all the time.

One of a series of informal reports on the operations and growth of the

ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.

for its customers, suppliers, employees, stockholders and other friends



U. S. PAVILION was so alluring that there was a near-riot on the opening day.

economic policies. To do this, it must try to steer a course between neighboring Soviet power and friendliness toward the West—without becoming a victim caught in the middle.

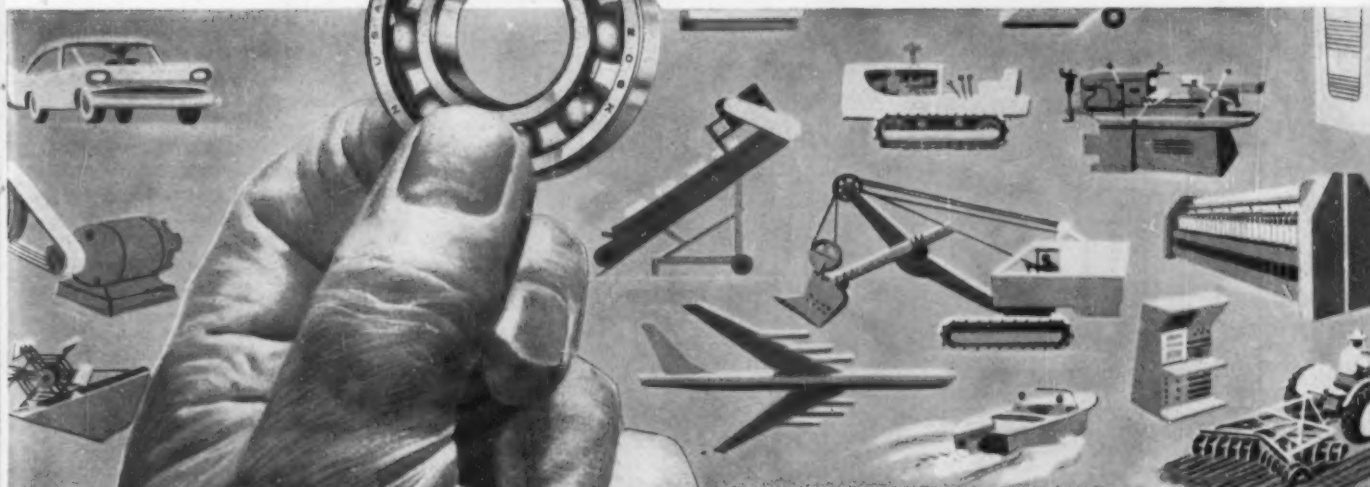
• **Trade With West**—Already it has shifted more of its foreign trade to the West. Before the October Revolution, only some 30% of its trade was with non-Communist countries. Now roughly 45% of trade goes to these countries. In addition, Poland has cut off most of its coal exports to the Soviet Union and East Germany. Meanwhile, it is boosting both imports and domestic production of goods for home consumption. But at the moment this new economic policy is leading the country toward a bigger and bigger trade deficit—which may amount to \$225-million this year.

That's why the Polish government sent a negotiating team to Washington several months ago to get economic aid. The Poles asked for \$300-million—an amount the country needed, at the minimum, but Moscow couldn't provide.

• **Economic Aid**—Poland ended by getting much less than it had hoped for—\$95-million. But the U.S. ended by giving a lot more than many Congressional leaders wanted to give. Both Sen. William Knowland and Sen. Styles Bridges have been unhappy over giving aid to Poland. Their argument is that by helping Poland grapple with its economic problems, the U.S. is "only relieving Moscow of fulfilling its commitments."

The Administration made its decision on the basis that Poland now is a "friendly" country and worth a gamble on economic aid. But Poland won't get all the money at once. Some \$46.1-million of the \$95-million depends on

DIVERSITY

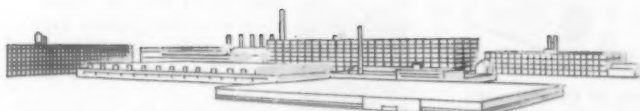


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"...on the political side, the country is still a long way from stability..."

STORY starts on p. 134

when Congress approves more money for farm-surplus disposal. And so far the House has delayed action on this because of the dispute over extending this aid to Communist countries.

Probably the most unusual aspect of the aid agreement is the fact that it has no strings attached. Thus, the money loaned is as much a sign of official U. S. support for the new Polish regime as it is a crutch for helping the country solve its economic troubles.

- **Three-Year Plan**—Poland has not yet completed the drastic revisions it is making for the three remaining years of its five-year plan. But the Polish exhibit at the Poznan fair gives some indication of the direction in which the country's economy has headed since the October Revolution. Here are some of the highlights:

- The government still controls the economic planning for basic, heavy industry—but it has relaxed its grip. At last year's fair, a state export agency displayed the locomotives and heavy equipment produced by the Stalin Works—Poznan's big metal-working complex. This year the factory, now called the Henryk Cegielski Works after its pre-war owner, has an independent stand at the fair.

- The government is giving some leeway to the development of private enterprise. From the Poznan exhibit, it's obvious that smaller companies making such consumer products as gloves, crystal, and furniture are showing slow but significant progress.

- Fast progress on the export side may come from early development of shipping, shipbuilding, and chemicals. The Polish exhibit emphasizes these three areas of possible export earnings.

- Stepped-up imports are one way the Polish government hopes to salve the workers' discontent over the shortage of consumer goods. One indication of this is the size and commercial slant of West Germany's fair exhibit—a display obviously based on expected Polish imports from the West.

- **Still Shaky?**—Poland hopes for expanded commercial relations with the U. S. But it's not just Poland's desperate economic situation that will hold back this kind of development. For—on the political side—the country is still a long way from stability. That's obvious from the fact that this year's fair has been scheduled to close five days before the anniversary of the 1956 uprising—to forestall any new outbreaks of protest. **END**



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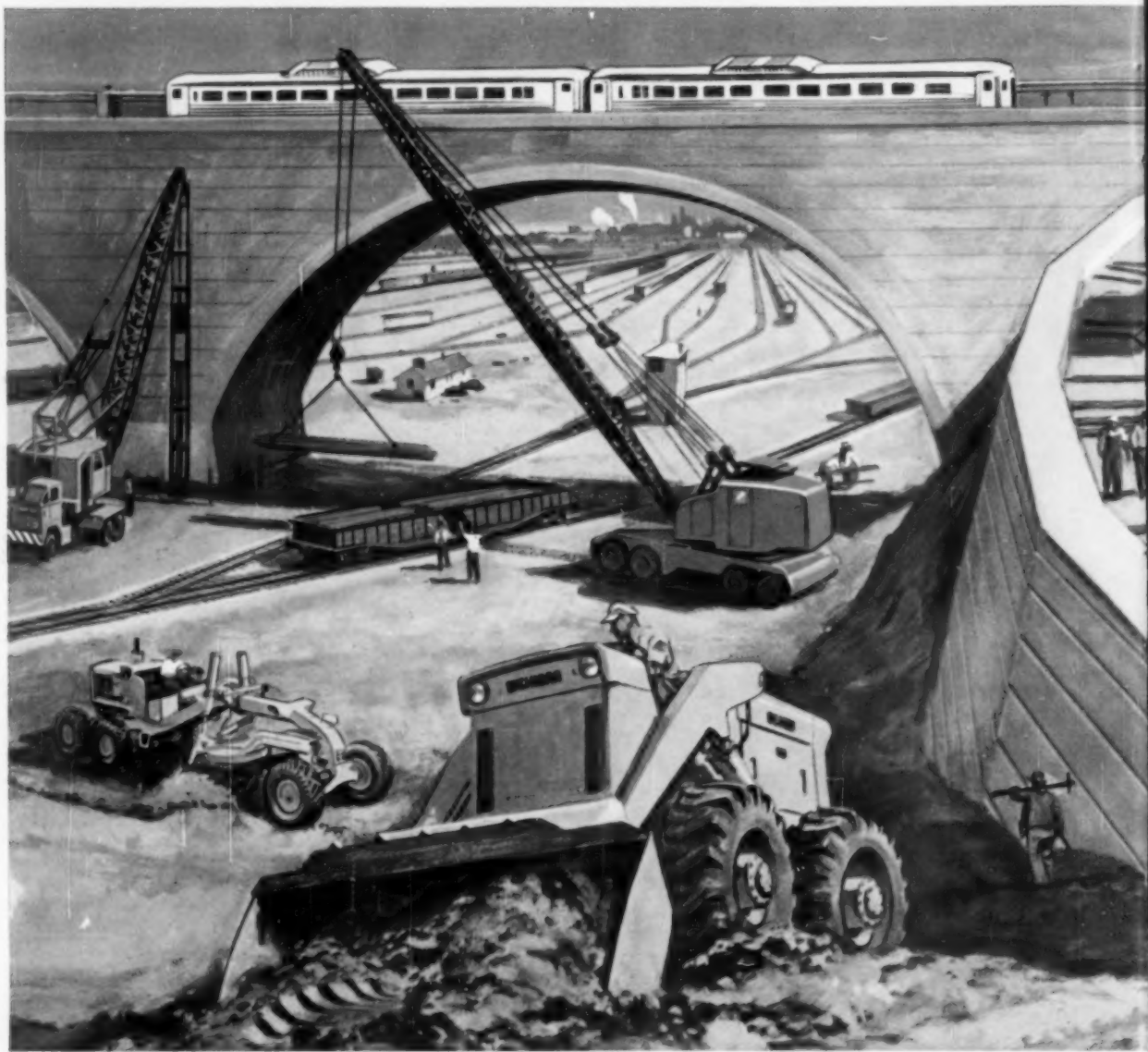
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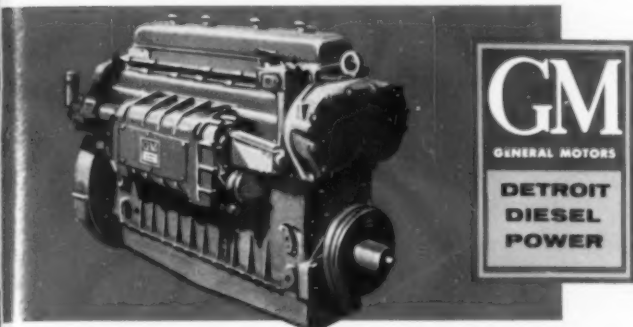
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(Answers at bottom of page)

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Chesterfield, Liggett & Meyers Tobacco Co.

Old Gold, P. Lorillard Co.

INTERNATIONAL OUTLOOK

BUSINESS WEEK

JUNE 22, 1957



The arms control talks in London are moving ahead.

Pres. Eisenhower has virtually accepted the Soviet proposal to halt testing of large atomic weapons for a trial period of two or more years—on condition there's an adequate system of international inspection. The President apparently has dropped previous U.S. insistence on tying a test ban to suspension of H-bomb production. He still will hold out, though, for an understanding that production be brought under control at a later stage.

The Soviets, for their part, seem ready to accept a compromise U.S. offer on reduction of conventional forces. Under this compromise, the U.S. and the U.S.S.R. would each cut these forces to 2.1-million men. (The Russians had originally demanded a cut to 1.5-million.) This would follow the conclusion of a test agreement.

Eisenhower's tentative endorsement of the Russian test ban proposal will stir new political controversy here and abroad.

U.S. officials who have been skeptical about the London talks are saying that a test agreement now would be a bad mistake. They argue that it would advance a long-term Moscow objective to neutralize our nuclear arms lead—by having us concede in effect that H-bombs are "dirty" weapons that shouldn't be tested, let alone used.

The British and the French may well resent U.S. backpedaling on the test issue. The British are just entering the H-bomb race, and the French seem anxious to get into it. In the past, London and Paris have insisted even more than Washington that any test ban should be tied to a halt in production of nuclear weapons.

The political ruckus over Harold Stassen's conduct of the arms control negotiations probably won't hurt the chances of reaching an agreement. That's assuming the Russians really mean business.

Stassen, after all, is merely a front man for Eisenhower and Secy. of State Dulles. The President's Special Assistant will undoubtedly be replaced by Dulles if and when the London talks get down to brass tacks.

But the row over Stassen, and other differences within the West, won't help, if the Kremlin actually is more interested in propaganda than in an agreement. It would give Moscow a chance to stall and still blame the failure on us.

In any case, there's bound to be a lot more political fallout before anything is signed. There's even a danger that the arms control question will turn into a political issue here at home. You can see signs of this in Sen. Lyndon Johnson's rebuff of a Dulles suggestion for having a bipartisan Congressional group sit in on the London talks.

Communist bigwigs are doing a lot of public talking these days—and revealing stresses and strains in the Communist world.

A significant speech by Mao Tse-tung, top man in Red China, has just been released. (It had already leaked through Poland.) The speech tells as much about the nature of Communism in China as Nikita Khrushchev's 1956 de-Stalinization speech told about Communism in Russia.

What's more, Mao took his own potshots at Stalin and added some at

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

JUNE 22, 1957

post-Stalin Soviet policy in Hungary. In doing so, Mao refused to fall in with Khrushchev's recent effort to rebuild ideological unity in the Communist world. This is bound to cause trouble for Moscow in Eastern Europe, especially in Poland.

Mao's speech is important for what it reveals about Red China's economic troubles. In fact, the Chinese leader undoubtedly took the line he did in an attempt to let off the pressure of discontent at home.

Here are some of the economic weaknesses Mao admitted:

- **There isn't enough food** to support China's fast-growing population. (He says the country doesn't dare let its population pass 600-million.)
- **Industrial production can't be increased fast enough** to permit higher real wages.
- **An investment policy based on underconsumption**, as Soviet policy is, brings dangerous tension between the Communist party and the people.

Clearly, Mao is trying to slow the pace of Soviet-style economic growth, after having accelerated it only a year ago.

At that time, he was encouraged to go fast by a good harvest or two in China, plus Moscow's promises of considerable economic aid, including capital goods from Eastern Europe. So Mao pushed farm collectivization and set fantastic targets for heavy industry.

The payoff has been (1) declining farm production, with millions of farmers leaving the collectives; (2) rising prices for everyday necessities; and (3) serious industrial bottlenecks.

The industrial trouble has been aggravated by the failures of Eastern Europe to deliver capital goods—a direct outcome of last fall's revolutions in Hungary and Poland.

—•—

The Girard case in Japan is casting a shadow over Prime Minister Kishi's trip to the U. S. (page 126).

Popular resentment in Japan over the case is intense. Kishi's own political position—which looks good otherwise—may be jeopardized.

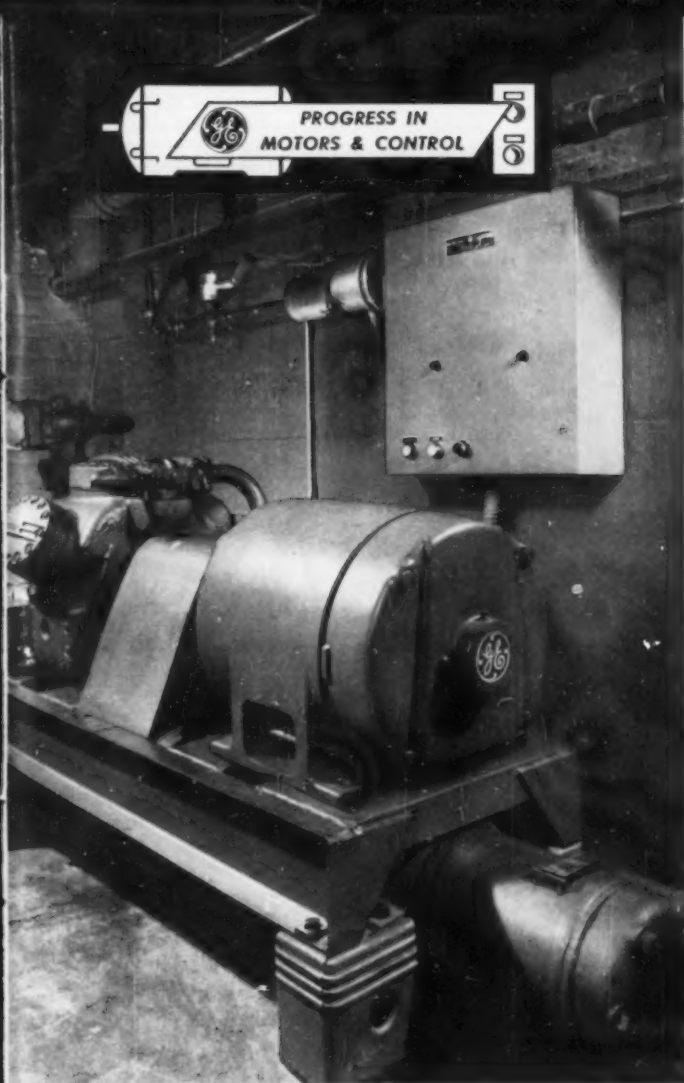
Washington observers are saying you can't rule out anti-American riots in Japan, like the recent outbursts in Formosa, if U. S. authorities deny Japanese jurisdiction in this tangled legal issue.

—•—

The World Bank is about set to make two big new loans to India.

One would be for about \$75-million to cover the early foreign exchange costs of a five-year Indian railroad improvement program. If the program goes well, the World Bank may make additional loans—perhaps totaling as much as \$300-million. But the Bank will be keeping a wary eye on the deteriorating Indian balance of payments (BW—May11'57,p127).

The Bank is also considering a \$35-million loan for Tata Iron & Steel Co. (Tisco), India's major private steel producer. It would continue the Tisco program of expansion and modernization for which the Bank has already lent \$75-million. The only hitch is that Tata must secure other foreign capital in conjunction with the new loan.



A GENERAL ELECTRIC MOTOR-CONTROL DEVELOPMENT:

New starter improves operation, speeds delivery of air conditioning motors

To meet the needs of modern air-conditioning equipment, General Electric has developed a completely new concept in reduced-current motor starting. Called *full-acceleration* part-winding starting, the concept now allows full acceleration of motors to full speed on the part winding, quieter motor operation, and reduced light flicker.

REDUCED-CURRENT MOTOR STARTING is a strict power company requirement for many commercial buildings. Without it, the large compressor motors, which may draw six times normal current when starting, could cause light flicker and voltage variation all along the line. Conventional part-winding starting systems have been developed as the most-economical answer to this problem.

Now, to provide *full-acceleration* part-winding starting, General Electric engineers have developed a new universal magnetic starter with a unique two-contactor arrangement, one with four poles and one with two poles, each selected for half the horsepower rating involved. This makes possi-

ble full-acceleration part-winding starting with standard dual-voltage G-E Tri-Clad* '55 motors on 220- or 208-volt circuits. Because standard motors can now be used, air conditioning manufacturers and contractors can get immediate delivery—often right from a G-E distributor's stock, or from an Apparatus Sales Office.

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"Right to Work" Laws Go Local

● California's foes of union shop, balked at the state level, shift their drive to rural areas.

● Two counties have already passed ordinances against compulsory unionism and others are thinking of it.

● If the laws stand up under court tests, they may start a trend in other states.

Proponents of "right to work" legislation in California, frustrated in efforts to get a state law passed, are now focusing their energies on rural areas. Two counties have enacted ordinances barring the union shop. Petitions are being circulated in another. Groundwork is being laid for similar campaigns in perhaps a dozen more of the state's 58 counties.

• **National Significance**—Right now, this county by county strategy is confined to California. But there are indications that it won't stay that way. Those who want the union shop curbed in other states are watching the West Coast. If the county laws there stand up under legal attack, what is now a localized campaign can quickly become a national one.

Organized labor is frankly worried. Its leaders fear that "right to work" forces may be able to win extensive footholds in even the most industrialized—and unionized—states if the county ordinances meet court tests.

Bills to curb the union shop came up in 13 legislatures this year. Indiana became the first industrialized state to adopt such a law. Kansas put a "right to work" proposal on a referendum ballot for 1958. Nine assemblies decisively defeated curbs. Measures are pending in the others.

• **In California**—Those seeking a union shop restriction in California have a long record of setbacks on the state level. In 1944, a constitutional amendment placed on the ballot by initiative lost by more than a half-million votes. Subsequent efforts to get the issue on the ballot failed. Again and again, "right to work" bills died in the state legislature; the most recent, a watered-down version, failed in the session that ended last week.

The new strategy—for action at the county level—developed out of a casual suggestion. Palm Springs employers were worried about the possible effects on tourist trade of picket lines of Hotel & Restaurant Employees at resort hotels. When they complained to their legal adviser last fall about the legis-

lature's thumbs-down attitude on "right to work" legislation that would bar organizational picketing, the attorney gave them a curbstone opinion: Adopt a local ordinance, he said, instead of waiting on the state to act.

The idea took several weeks to develop, and longer to go through the legislative processes of the Palm Springs city council. It ran into heavy opposition—and mass demonstrations by unionists. Once adopted, it was immediately challenged in court. A Superior Court judge ruled the ordinance invalid. The city has appealed the decision (BW—May 4 '57, p155).

• **Counties Act**—The Palm Springs action is credited with giving county groups incentive to move against union shop agreements. In late April, the Tehama County board of supervisors in Red Bluff enacted the first county "right to work" ordinance. The San Benito County board in Hollister passed a similar one two weeks ago. A campaign in Lake County is well advanced, and following almost exactly the pattern set in Tehama and San Benito Counties.

These are predominantly rural counties. They have no large concentrations of industrial workers; consequently, there is no effective union political machinery in any of them.

Citizens' committees were organized in Tehama and San Benito Counties. Each retained a San Francisco attorney, Nathan Berke, as legal adviser.

Berke represents the California Assn. of Employers, which has as members 1,700 companies in the smaller cities of Northern California and Nevada. The association actively participated in the successful Nevada "right to work" campaign, and has urged similar legislation for California. However, its president, Winston M. Caldwell, denies that the association initiated or inspired the county moves against the union shop.

According to Caldwell, the Tehama and San Benito campaigns were "grass roots movements" and his group helped only in line with its normal function

to "aid and assist anybody who is interested, with educational material and information."

The campaigns followed a pattern of petitions circulated to registered voters, extensive educational drives, and the use of radio and television to "sell" the idea of "right to work" legislation to the citizenry of each county. The end result was identical ordinances.

• **Two Differences**—The twin county ordinances differ in two ways from the Palm Springs regulation:

• The city ordinance was incorporated in the municipal criminal code, and makes violations misdemeanors; the county laws provide civil remedies.

• More importantly, the Palm Springs council adopted its ordinance as one based on a municipality's right to legislate to preserve local law and order; the county ordinances are, proponents say, actions by "agencies of the state" and in line with provisions of Sec. 14(b) of the Taft-Hartley Act—which allows states to bar union shop agreements.

Tehama and San Benito "right to work" forces say these differences give the county ordinances sound ground to stand on in inevitable court tests.

• **First Use**—The first-adopted Tehama ordinance faces the initial—and crucial—test. Effective just a month ago, its provisions are now being used in an attempt to bar organizational picketing by locals of the Machinists, the Retail Clerks, and the Hotel & Restaurant Employees. The Superior Court has an injunction petition under advisement. No matter how it rules, the case will almost certainly go all the way to the U.S. Supreme Court.

Attorneys for both the county and the California Assn. of Employers on one side, the California State Federation of Labor on the other, agree that the basic issues involved will be fought over into the highest court.

The state labor federation is spearheading the attack on the Tehama ordinance—and through it the San Benito law and any others that might develop out of the current county-by-county strategy. It is counting on national AFL-CIO assistance.

Labor's case will be based strongly on a contention that T-H Sec. 14(b) applies only to a state as a legal entity, not to any parts of a state. Supporting this argument, they say that in any event a county may not legislate contrary to the state's labor code—which, the union attorneys contend, opposes "right to work" laws and sanctions the union shop. **END**



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U.S. Scans British Labor Laws

Britain's long experience in voluntary registration of unions and in fund disclosure may set a pattern for U.S. legislation to regulate union financial operations.

When Congress gets down to the job of writing a law regulating union financial operations, its advisers are almost certain to bring up the precedent of British experience. Much of what is now proposed—and argued about—in this country has been routine for British unions since 1871.

• **Voluntary**—The British have gone further than current American proposals for public disclosure of health-welfare and pension funds; they have brought all union financial affairs under regulatory laws.

The British law is based on voluntarism. Unions decide for themselves whether to register and issue required reports; they aren't compelled to do so. However, registering and reporting are rewarded by tax and other benefits they cannot otherwise have.

Today, 90% of the 9.5-million union members in Great Britain are in unions voluntarily registered with the Chief Registrar of Friendly Societies. This agency publishes an annual statement dealing with their finances.

Registered unions in 1955 had total assets of £76.7-million (about \$214.5-million) and an annual income from dues of £19.3-million (\$54-million). They expended almost £19.4-million, including £4-million on "friendly benefits"—akin to U.S. welfare benefits.

• **On the Decline**—As a result of the government's social welfare program, this type of union financial aid is declining. In 1939, it accounted for nearly half of British union expenditures; today, the proportion is only about one-fifth.

British unions today are more interested in employer-sponsored pension programs with management committed to pay either the whole cost or up to two-thirds. The pension plans, usually guaranteed by an insurance company, and those plans jointly run by management and labor do not come under the British law for the voluntary policing of union finances. These are covered routinely by the laws applying to general business.

• **What They Do**—Here is what voluntary registration means in Britain:

• Registered unions must file with the Registrar lists of officers and copies of rules. These must include provisions governing expenditures, benefit payments, fines or forfeitures, the appointment and removal of officers, periodic auditing of accounts, and the inspection of books and membership lists "by

every person having an interest in the funds of the trade union."

• They must submit an annual financial statement to the Registrar, detailing assets and liabilities, receipts, and expenditures. Every union member can get a free copy of the annual return.

• The Registrar may make a formal investigation of the financial operations of any union on application from a significant proportion of its members.

• **Political Funds**—British unions may use funds to support political candidates. However, the money must come from a separate fund established by a majority vote of the members. Rules of the fund must be approved by the Registrar, and members must have the right to refuse to contribute to a union's political efforts.

• **What They Gain**—British unionists find that voluntary registration and disclosure rules have not substantially interfered with the inner workings of their unions. The privileges that go with registration have more than offset any red tape.

For instance, a registered union is exempt from taxation, including income and corporation taxes, and property and stamp duties. It is also exempt from provisions in British laws dating from 1799 requiring unions to reapply annually for certification.

A recent scandal, involving the suicide of the cashier of the Associated Society of Locomotive Engineers & Firemen and a missing £10,000, points up a weakness in the present law. As it now stands, union accounts may be submitted either to an auditor approved by the Registrar or to two or more persons appointed under the rules of the union.

An investigation prompted by the suicide of the society's cashier showed that an audit by three union members failed to uncover the mishandling of union funds.

Although the British Trades Union Congress advises its members to use qualified auditors, nothing in the law requires such a safeguard. About 60% of all registered unions now use approved auditors, the rest laymen.

Few prosecutions have been necessary under the British system of voluntary policing. These have mostly involved a failure to file financial statements required under the law. According to the Chief Registrar's report for 1955, only one union out of 515 registered failed to comply. **END**



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The Court Backs...

... civil liberties in a series of rulings. In Watkins decision it redefines the limits of Congressional probes.

The Supreme Court this week continued a trend of rulings that constitute a strong reaffirmation of basic civil liberties. Four new and controversial decisions following close on the heels of two others are widely interpreted as a curb on the powers of the executive and legislative branches of the government where "an invasion of the private rights of individuals" may be involved.

The trend is particularly significant in view of the current probing into charges of corruption and racketeering in unions. Witnesses before Congressional committees are given greater protection against questioning.

• **UAW's Interest**—The United Auto Workers had a special interest in one of the current decisions, which upset the conviction of UAW organizer John T. Watkins for contempt of Congress.

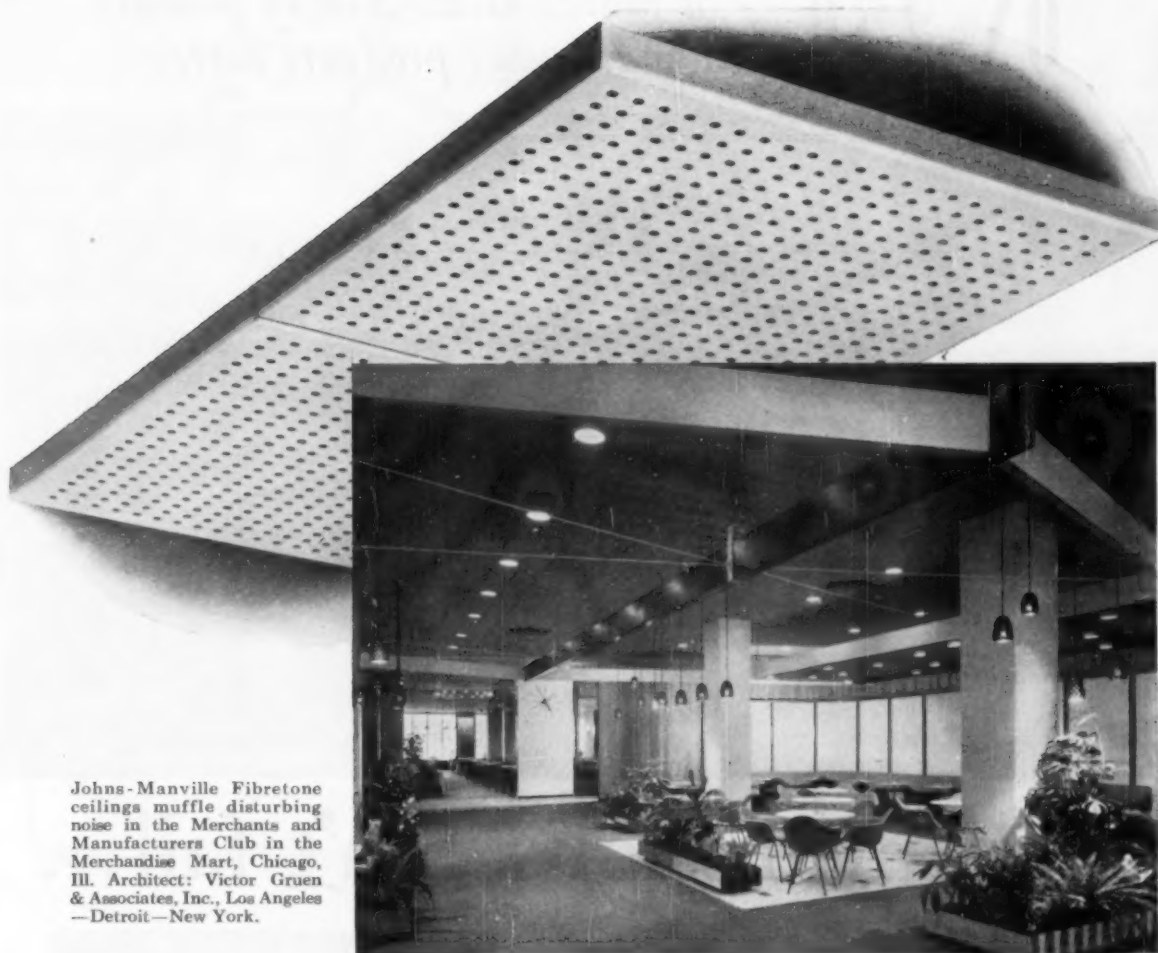
Watkins, now on UAW's agricultural implements workers staff, fought the auto union as a staff representative of the leftwing United Electrical Union before 1953. In August of that year, he led 12,000 UE farm equipment workers in a bolt to the auto union.

Early in 1954, the House Un-American Activities Committee questioned Watkins about his past connections with Communists. The unionist talked freely about his own cooperation with the leftists before 1947 and about those he believed were still Communists, but he balked at identifying others who had past Communist connections but who, he felt, no longer belonged to the leftwing.

He was convicted for contempt. UAW felt that the case posed a basic civil liberties issue, and financed his defense.

• **Overstepping**—In the Supreme Court majority (6-1) opinion Chief Justice Earl Warren held that the House committee had exceeded constitutional limits on the scope of Congressional investigations. The majority agreed that Congress should—and does—have investigative powers, but ruled that the jurisdiction and purpose of probes must be clearly defined. Congress, it said, should determine that a "particular inquiry is justified by a specific legislative need."

"There is no general authority to expose the private affairs of individuals without justification in terms of the functions of the Congress," Warren said in his opinion. **END**



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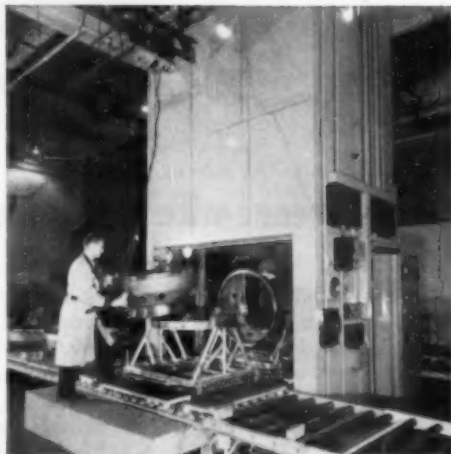
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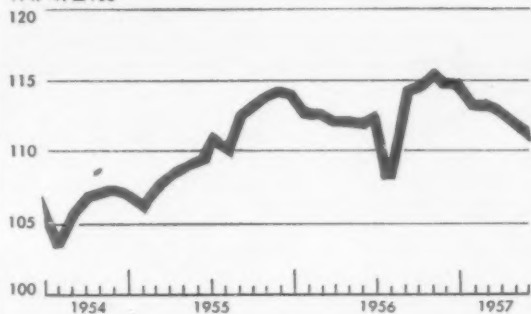
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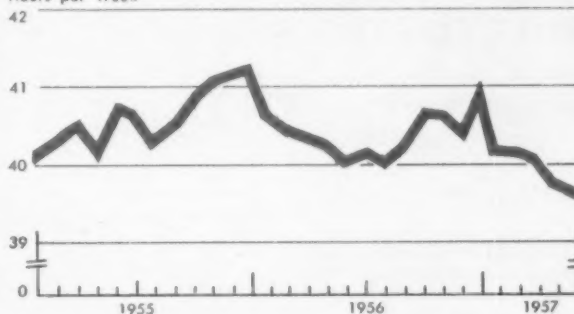
1 Fewer Workers in Factories...

1947-49 = 100



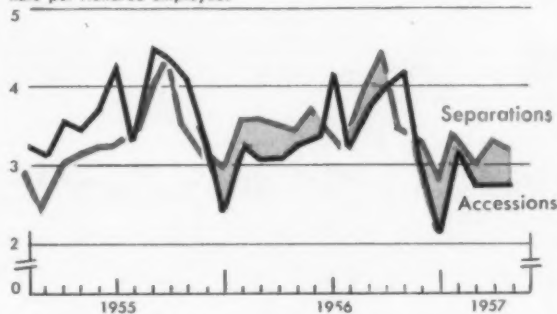
2 ...Work Fewer Hours

Hours per Week



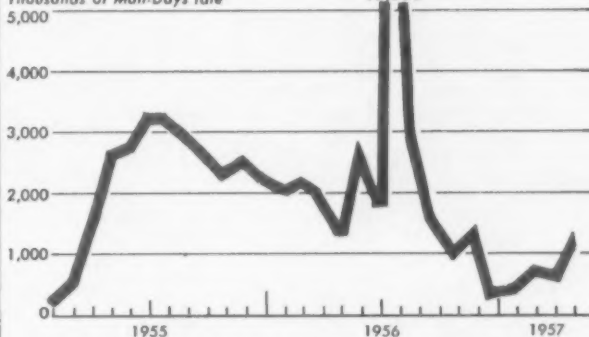
3 More Are Being Separated Than Hired...

Rate per Hundred Employees



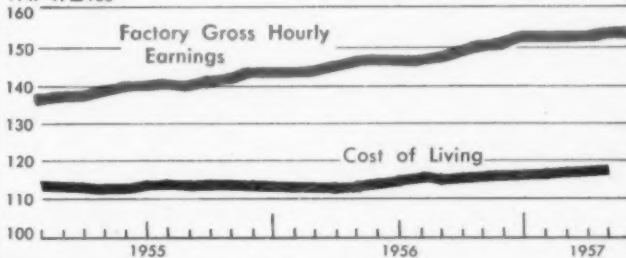
4 ...And Workers Are Less Prone to Strike...

Thousands of Man-Days Idle



5 ...While Gross Hourly Pay Has Flattened Out

1947-49 = 100



Data: Dept. of Labor.

© BUSINESS WEEK

Job Market Shows Weak Spots

Industrial employment particularly is on the decline, and organized labor is worried about it. However, total employment and unemployment, too, are about the same as a year ago, government statisticians point out.

Manufacturing employment, dropping more sharply than usual for this time of the year, declined in May for the fifth consecutive month, to a level of 16.7-million jobs—a half-million

fewer than last December. The number of factory production workers dropped to 12.8-million—about the 1947 average—despite a continued rise in factory output.

The rate of decline—"about twice the usual decline for this period," according to government reports—is interpreted as an indication of a mild recession in manufacturing. As of now, however, the situation scarcely affects total employment.

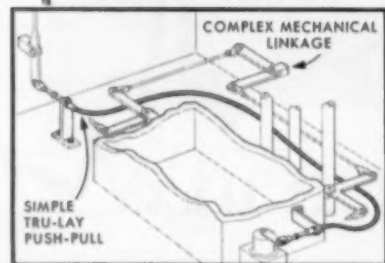
• **Seasonal Gain**—Employment rose to 65.1-million in May with the normal expansion of farm and construction jobs and increases in employment in whole-

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sale and retail trade, service industries, and government. Even so, according to a joint report by the Labor and Commerce Depts., the "substantial" gain of 917,000 in May left the employed total at about the level of a year ago.

• **Jobless Totals**—Unemployment remained unchanged, at 2.7-million, although it usually declines moderately between April and May. The government report noted, however, that adjusted figures for both the jobless total and rate of unemployment are "not significantly different from the corresponding 1956 levels, as has been the case so far in 1957."

Labor disagrees. AFL-CIO takes a generally less optimistic view of the figures, and deplores "sagging factory employment" that reflects "job cutbacks in heavy industrial products, automobiles and their supplying industries, and consumer durables other than radios and television."

• **Signs of Weakness**—The factory employment figures tell only part of the story. Other signs of a somewhat weaker labor market include:

• A further drop in the average factory work week to 39.7 hours in May, fractionally lower than a month before and the lowest level since September, 1954. The recent peak was a 41-hour average in December.

• More separations (layoffs or quits) than accessions (hirings) in May. Labor turnover continued at a lower rate than a year ago.

• The number of new strikes showed an upturn in May, but continued lower than a year ago—while man-days of idleness stood at a very low level. Long-term contracts are a big factor, but unions and their members generally show a wariness of strike action at a time of unemployment uncertainty.

• Gross hourly pay flattened out at \$2.05 early this year, and has stayed at that plateau for five months while the consumer price index continued to climb. In large part, the leveling-off of the pay figure reflects the loss of overtime premium pay in the decline from 41 to less than 40 hours a week. This offset wage increases.

Ohio Relents a Little on SUBenefits

Ruling allows workers to collect UC and SUB payments
(though not concurrently) on a provisional basis.

Ohio's Bureau of Unemployment Compensation last week ruled that some forms of supplemental unemployment benefits might be legal. The result was a quick flurry of excitement—and then spreading confusion that may not be cleared up until the BUC hands down definitive rulings in test cases.

An employers' group in Ohio has been among the most militant in the U.S. in fighting to keep unemployment compensation from SUB beneficiaries.

• **State's Position**—Basically, this is how things stand now:

In 1956, James R. Tichenor, Ohio BUC administrator, ruled that state unemployment compensation can't be paid to anyone while he is receiving SUBenefits from an employer. The ruling, which applied directly to auto-type plans, stands. Simultaneous state and private payments are not allowed.

• **Alternatives**—However, there are now alternative methods of SUBenefit payments in almost all auto, rubber, steel, and electrical manufacturing contracts. The two most common ones differ from the initial SUB plans in that private payments aren't made concurrently with state benefits. Instead, an unemployed worker:

• Draws state compensation for, say, three weeks and then in the next week receives nothing from the state but collects all the private benefits

due him for the four-week period.

• Or, collects his state unemployment compensation for the maximum period allowed by law, without withdrawing any SUBenefits, and then receives a lump sum payment of the full private supplement due him.

• **New Ruling**—The ruling by Tichenor's office last week instructed local SUB offices to process and pay claims for state unemployment compensation even though it is known that the claimant is using one of the two SUB alternatives. But, significantly, BUC warned that the state compensation is provisional; pending a legal ruling upholding the specific plans, any worker who collects state benefits under an alternative SUB program may have to refund the money if the plan is subsequently held to be illegal.

These instructions to local BUC offices (1) open the way to SUBenefits for workers under the two alternative programs, if only temporarily; and (2) more or less invite workers to file claims so that test cases may arise.

• **Specific Decisions**—So far, BUC has issued specific decisions against auto-type simultaneous payments and in favor of "income-security" or so-called glass SUB plans—under which an unemployed worker may draw only from funds in an account in his name and built up by contributions based on his own hours of work. **END**

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BW-6

The Young Man Who Solved a Fleet Problem



Sure, I was perplexed. So is everyone these days who is responsible for operating a fleet of automobiles.



Operating costs of our fleet units were shooting skyward like a guided missile.



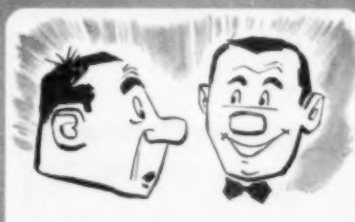
With rising gas prices, the "gas hogs" in our fleet were drinking us out of house and home.



We found our salesmen wasting a lot of valuable time looking for parking spaces big enough for their overgrown dinosaurs.



But when we learned we would have to rebuild the company garage to house these fleet monsters, we decided it was time for action.



So the Boss and I put our heads together . . . compared all the cars on the market . . . and discovered a most important fact.



Rambler costs less to buy and saves gasoline every driving mile. In fact, it's the border-to-border and coast-to-coast economy champ.



Parking is a cinch, too—even in the tightest places. And, of course, we didn't have to rebuild the garage to house these trim, compact cars.



Well—you guessed it. We replaced our whole fleet with Ramblers and watched our operating costs plummet. You'll have the same experience when you switch to Ramblers. I know!

FLEET LEASING ARRANGEMENTS AVAILABLE

If your firm leases fleet units, ask your leasing company for low Rambler rates or write us for the names of leasing companies with whom we have working arrangements.

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In Labor

• • •

Merging of AFL and CIO Units Completed in Half the 48 States

Mergers of AFL and CIO organizations have now been completed in 24 states, and only the formalities stand in the way of unification in two others.

Connecticut became the first of the Eastern seaboard's highly industrialized states to have a combined AFL-CIO federation when a merger was O.K.'d this month. A new Connecticut State Labor Council (AFL-CIO) will represent nearly 200,000 unionists.

A few days earlier, Mississippi labor groups merged, completing unification efforts that ran into trouble in 1956—when AFL unions rejected proposed merger terms. The new council has a membership of 30,000.

The latest consolidations bring national AFL-CIO to the halfway mark. R. J. Thomas, special assistant to the federation's Pres. George Meany, and others assigned to merger negotiations expect consolidations at a faster pace during July and August. However, they acknowledge that "major problems" are ahead in many of the big industrial states.

Two deadlines are important. Union bodies that haven't completed mergers by early August must report their progress—or lack of it—to Meany before the executive council meeting. The AFL-CIO will assign troubleshooters where needed.

If mergers still haven't been worked out by December, despite the troubleshooters, AFL-CIO's biennial convention will dissolve existing, rival AFL and CIO organizations and set up new, unified councils to replace them.

• • •

Federation's No-Raiding Pact Called "Highly Satisfactory"; 122 Cases Processed

The AFL-CIO No-Raiding agreement—adopted in July, 1954, as a first step toward labor's merger—has proved "highly satisfactory" in its operation, Secy.-Treas. William F. Schnitzler of AFL-CIO reported last week.

Since mid-1954, 122 inter-union disputes have been processed under the agreement—69 of them before the merger, the remainder since labor's amalgamation. Of the cases already disposed of:

- 88 were resolved through direct negotiations between the disputing parties, with federation mediators helping.
- 29 were submitted to an impartial arbitrator, David L. Cole, for final and binding determination under terms of the agreement. Six were later withdrawn, 20 decisions were handed down—and accepted by the parties, and three are pending.

Cole agrees in general with Schnitzler's enthusiasm for the pact that has, he says, "accomplished at least as much as we ever hoped." But while commenting that the agreement "has definitely been effective," Cole noted that there has been "some increase in activity,

and some of the cases get more and more difficult."

The agreement is a voluntary pact which covers only the signatory unions—currently, 103 of AFL-CIO's 138 affiliates. Its big weakness is that some important unions—including "raider" unions such as the Teamsters—won't accept the pact. As a result, many employers are still plagued by costly, troublesome inter-union disputes that occur outside the machinery of the no-raiding agreement.

• • •

State Can Exercise "Wide Discretion" To Bar Picketing, High Court Rules

The U.S. Supreme Court ruled (5-3) this week that a state has "wide discretion" to bar picketing by unions.

The decision upheld a Wisconsin injunction barring picketing pressure against a nonunion employer—intended, the state court found, to "coerce" workers into joining a union. This constitutes an unfair labor practice under Wisconsin labor law.

Three AFL-CIO unions carried the case to the highest federal court, contending the injunction violated constitutional rights. However, the Supreme Court majority ruled that there is "a broad field in which a state in enforcing some public policy [can] constitutionally enjoin peaceful picketing."

The court minority protested against "formal surrender" of constitutional protection of peaceful picketing.

• • •

Georgia Court Bars Enforcement If Union Shop Imposes "Ideology"

Georgia's Supreme Court last week handed down a railroad union shop decision that, some attorneys say, could be far-reaching in its implications. The court said it was "required" to uphold the union shop, but it ruled that nobody can be forced—by threat of loss of "bread or the means of obtaining it"—to join a union if dues may be used for "enforcing ideological conformity" on workers.

The U.S. Supreme Court has upheld the validity of union shop clauses negotiated under the Railway Labor Act in states with "right to work" laws that bar compulsory unionism. This is the ruling the Georgia justices said they "must follow."

At the same time, they noted, the high federal court reserved judgment on the enforceability of a union shop agreement if money paid to the union is used "to promote ideological and political issues and candidates [a worker] opposes," and which are not germane to collective bargaining.

This would be a contravention of constitutional rights, the Georgia court held, ruling: "His right to immunity from such exactions is superior to any claim the union may have on him."

The court ordered a case involving the Georgia Southern & Florida Railway Co. reheard by the trial court on the basis of complaints against the "substantial" use of union funds to "support ideological and political doctrines."

FINANCE



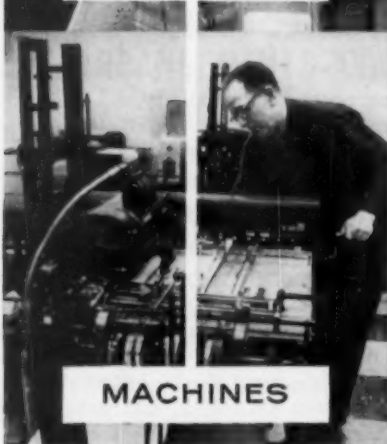
OFFICERS



SPECIALISTS



PEOPLE



MACHINES

Guaranty Stock Transfer Services Help Improve Stockholder Relations in N.Y. Capital Market

Efficient transfer services by experienced staff also eliminate corporation's peak work loads involving transfer and dividend details.

Because the corporate stock transfer function involves ever-increasing legal technicalities, tax problems, and peak load work periods, more and more corporations are using stock transfer facilities such as those offered by Guaranty Trust Company.

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It Contributes to a Stock's Standing. New York transfer facilities make it possible for stock certificates to move from broker to broker, from buyer to seller more efficiently. This enhances a stock's standing when traded in the country's primary market.

It Improves Stockholder Relations. A New York transfer agency provides a ready source of information regarding transfer requirements in the important New York capital market. Guaranty's experienced personnel and modern equipment are assurance that stockholders will receive their certi-

ates, checks and notices in the fastest way possible.

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It Eliminates Unnecessary Expense. The corporation saves insurance and mail expense. A professional and highly trained force provides expeditious handling of peak load periods. Overtime and disrupted work schedules on the part of the company are eliminated.

Guaranty Trust Company has had wide experience acting as transfer agent and is presently handling this highly specialized work for several hundred corporations, with shareholders ranging from 120 to over 400,000. Guaranty knows the best techniques and ideas applicable to stock transfer functions.

Help on Your Transfer Problems. Whatever the size of your company, Guaranty's experienced personnel, modern equipment, and professional guidance are available to perform stock transfer or registrar services for you. If you would like to learn more about the advantages of New York transfer facilities from the corporation viewpoint, write for a complimentary copy of "Your Company, Its Stockholders, and the New York Capital Market." Address Corporate Trust Stock Transfer Dept. BW-2.



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THE MARKETS

Wall St. Talks . . .

. . . about how the selective market stresses oils . . . Revlon rumors . . . damper on bond popularity . . . discounting steel's high output.

The ultra-selective market: Streeters say that about 40% of all recent buying has involved oil stocks, both for long-term investment and short-term speculation. Next in order of popularity have been the drugs and chemicals.

A flood of rumors on Revlon, Inc. The Street has heard variously that the cosmetic company is (1) negotiating for the drug end of Schenley Industries, Inc.; (2) trying to buy stock control of Schering Corp. in the open market (BW-Jun.15'57,p159); (3) dickering for the Squibb (drug) division of Olin Mathieson Chemical; (4) talking merger with National Distillers Corp., (5) hoping to buy Warner-Lambert Pharmaceutical. All the talk has had a considerable effect on Revlon shares; Tuesday they were the most active stock on the Big Board.

Bonds haven't been drawing much stock market money of late, despite the liberal returns they're offering. Increasing fear of inflation is the reason; brokers say it has brought a growing desire for equities that offer "capital gains" possibilities, rather than for fixed interest obligations even when they offer a much higher cash return.

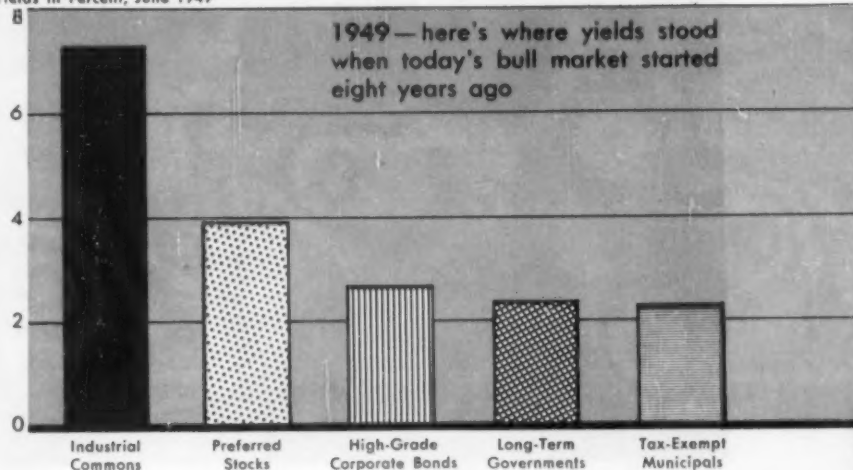
The rise in steel output should be discounted, some Streeters claim. They argue that much of it is July business pushed into June to escape coming price rises; next month operations are likely to slump to around 70% of capacity. By September, though, they expect low steel inventories to bring a rush of replenishment orders.

Echo from the past: The 1956 annual statistical report of the Northern Pacific Ry. lists the purchase of two cords of wood for locomotive fuel, along with 9.3-million gal. of fuel oil and 395,000 tons of coal.

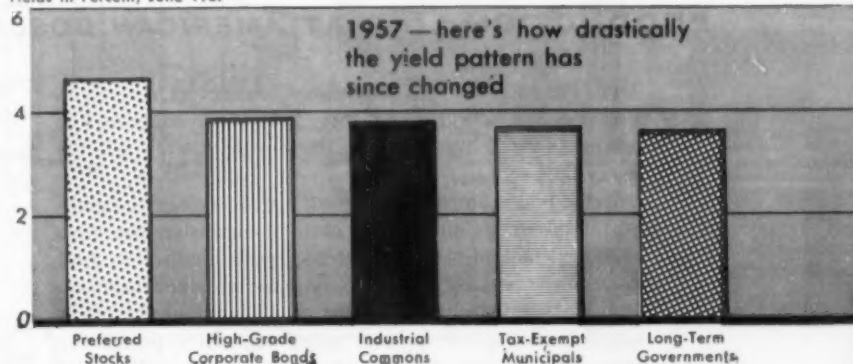
Analysts mulling over the near-term business prospects are, keeping a close eye on the increasing tightness of the money market at a time when business is presumably engaged in liquidating inventory. In this they find an important question: Where will the money come from to finance the wave of inventory reaccumulation that economists predict for this fall?

The Security-yield pattern: how sharp has been its change

Yields in Percent, June 1949



Yields in Percent, June 1957



Data: Standard & Poor's Comp.

Bond Yield Tops Stocks

For the first time in 20 years, the high-grades offer a bigger return than the commons. But no one is panicky.

Early this week the stock market was busily engaged in getting its breath.

Whatever over-all trend did appear in these "breather" sessions of the Big Board was definitely on the down side, under the pressure of increased profit-taking. Thus on Monday only 413 listed issues showed gains, compared with 511 that declined.

The gap was much larger on Tuesday, when there were only 288 gainers compared with 669 losers. And Wednes-

day saw but 201 up and 708 down.

Still, the over-all decline at most times was strictly limited to a downward drift, rather than any sharp across-the-board drops spurred by numerous and determined liquidation programs. And the end result at midweek—despite Wednesday's rather rough session—was that the bulls were not overly worried, nor the bears particularly jubilant—at least on the surface.

• **Big Event**—Just the same, what happened up to midweek may well be the first fruits of a new uneasiness brought on by a momentous event pertaining to the market's technical structure. That event occurred on Monday when Standard & Poor's announced that its index of common stock yields for the first

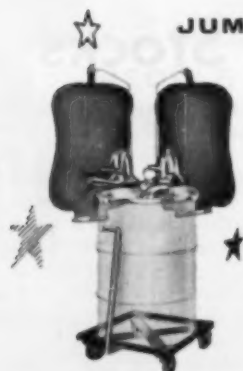


TORNADO PAYS OFF ON THE PRODUCTION LINE AT AMERICAN BOSCH

Two Tornado Jumbo Vacuum Cleaners at American Bosch in Springfield, Mass., help keep the production line humming—and by the way, have paid for themselves many times.

In the photo above, you see two Tornado cleaners “gulfing” non-ferrous metal chips clear of expensive dies, thus enabling machinists to work uninterrupted and safely. And these chips also have a high reclaim value when sold as scrap.

A Tornado Jumbo Conversion Cleaner could mean speedier production, greater safety and extra profits for your company, too. Why not try it—we know you’ll buy it!



JUMBO CONVERSION

If you need greater suction—in addition to larger storage—the Tornado Jumbo Plate which fits all standard 55-gallon drums will deliver, by using two motor units, up to 3 H.P. of suction. Tornado also supplies a 4-wheel dolly with 2 swivel wheels and a pulling handle.

Write for Bulletin No. 758

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time in 20 years had dropped below the matching measure for high-grade bonds. S&P's said that on the basis of June 12 computations the average yield of 50 representative Big Board commons was down to 3.82%, while a composite of high-grade corporate bonds showed a yield of 3.93% (chart).

Actually, of course, common stock yields have been much lower than they are now at various times in the past. In August, when the 1949-1957 bull market reached its peak, S&P's index of stock yields was only 3.70%; and in the spring of 1946 the index had been down to 3.36%.

But low as those past yields were, they were higher than the contemporary figure for high-grade bonds. Last August, the bond index was a modest 3.35%, which left common stocks with a return 1.1 times greater than the fixed-interest obligations. The disparity was even greater back in 1946, when common stock yields were almost $\frac{1}{2}$ of 1% lower than now. At the earlier date, the average bond return was only 2.56%, leaving the common yield 1.3 times higher.

• **Bond Market**—Wall Streeters—including many bears—see no cause for panic in the fact that the yield of high-grade bonds is now higher than that of common stocks. For one thing, high stock prices are not solely responsible for the present abnormal situation on yields. Just as big a role—and some say a bigger one—has been played by the serious deterioration of the bond market that began a few years ago and has been sharpening (page 26).

Streeters also point out that this is not the first time ever that bond yields have topped common stocks. As one of them observes—though the illustration has its unhappy connotations: “For an extended period in the 1920s, a similar situation prevailed.”

• **Counsels of Caution**—These considerations don't mean that the present era is so different that the situation can be ignored—and many “pro” counselors are very emphatically not ignoring it. For instance:

Moody's Investors Service doesn't believe that the situation is *prima facie* evidence that stock prices are too high. But it does “think that the current comparison shows somewhat vividly that this is no bargain time for stocks generally.”

Standard & Poor's says that the situation “does . . . call attention to the level of stock prices, which is high by almost any historical yardstick,” and, S&P's adds, “it emphasizes the desirability of having some cash reserves as protection against reversals, and the need for extra care in selecting issues for investment of new funds.” **END**

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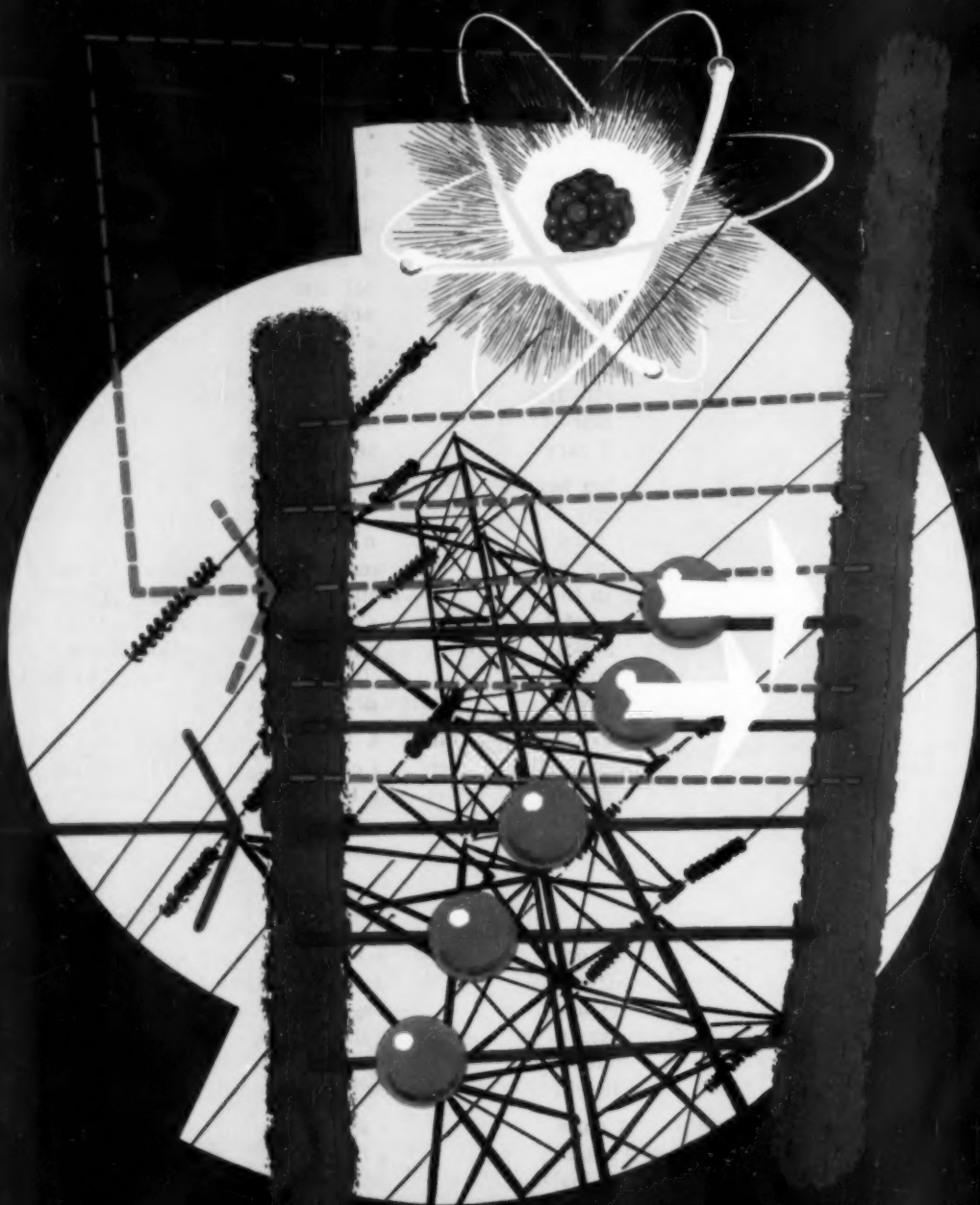
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PERSONAL BUSINESS

BUSINESS WEEK

JUNE 22, 1957



Will you be looking at new houses this summer? If so, a simplified written checklist may be a good idea—whether you'll just be scouting for ideas to talk over with your architect, or searching in earnest to find a house before school starts in September.

Here are some basic construction pointers that apply to any new house no matter what style it is—traditional, contemporary, or even super-electronic like Monsanto's new all-plastic cantilever (BW—Jun.15'57,p179):

Basement: Check for cracks in the floor—which mean thin concrete. Floor should be 4 in. thick, with steel mesh reinforcement. Look for spots of dampness in the walls—due to lack of waterproofing (cement plaster and tar) between the masonry and the outside earth. Ask if floor drains run to the sewerage or drainage system, or, in a country house, if they run to dry wells remote from the house. Don't be alarmed if you see a sump pump and generator—this may simply be a wise precaution in case of flash floods. But check carefully. It could mean excessive ground water.

Heavy wooden beams, in place of steel, are proper in some cases—if they are properly designed—usually not over 8 ft. or 9 ft. Go upstairs and come down hard on your heels on the ground floor—any noticeable bounce or shaking probably means weak under-construction. Look for a termite shield in the basement—a metal strip between the masonry wall and the first tier of wooden beams. Check for the letter "CONST" on exposed beams, indicating first-grade lumber. Don't be fooled by the width of these beams—this is really no selling point. Their height in relation to width, and the type wood, are what determine strength.

Open the electric panel-board. A house in the \$40,000-plus range should have something like 20 separate circuits—you can tell by counting the fuses or circuit-breakers. Check the hot water tank—it should have a 10-year guarantee, about an 80-gal. capacity, and an adequate recovery rate. An expert is needed for even a casual inspection of heating and air-conditioning systems.

Outside hose or pool connections should have inside cut-off valves to prevent pipe-freezing in winter. Be sure there's a step-down of 4 in. to 6 in. from the basement to the garage—to keep gasoline fumes from entering the house. Check to see that single garage doors are 9 ft. wide—not 8 ft. Double-doors are hard to operate, in spite of what the builder says. If your wife will handle them, you'll want a motor (\$300 and up).

Shell: Look closely at the outside siding lumber—if it's A-grade, it's knot-free. If it's a brick house, check to see that the space between the bricks is even and that the mortar is not patched in color, which indicates a poor mix. And don't believe that brick or stone properly stops at the foundation level—because in an expensive house, it should go all the way to the ground. Brick veneer does not indicate cheapness in some localities where solid masonry is unduly expensive.

If you're looking at a flat or low-pitched roof, don't expect to see slate. Slate is fine on steep pitches, but tends to leak on a flat surface—and it's hotter, too. It costs about three times as much as asphalt shingle. There's a new trend toward light-colored and white roofs—to reflect heat from low-built contemporary houses.

Proper gutter material depends a lot on climate—no one type is best. As an example of what climate can do: Aluminum unless specially treated may not hold up well near the ocean because of salt in the air.

Interior: Double-laminated drywall (not the standard plasterboard) is

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

JUNE 22, 1957

as good or even better than wet lathe-and-plaster. Cost is about the same. For a \$40,000-or-more house, the allowance for **wallpaper** should be \$5 to \$10 per roll. Experience with **radiant heating** (in floors or walls) has been good; but it's usually only used in a house without a basement—and it can't be used in a dual equipment system along with air-conditioning. A **staircase step-up** should not rise more than 7 in.—for comfort.

Biggest new electronic trends—all tested and practical: **dimmer controls** for dining and living rooms (\$30 a room); **multiple switches** for controlling lights in remote parts of the house and grounds (\$300 to \$500 for a complete job); **built-in hi-fi speakers and inter-com systems** (combined for around \$1,200).

Bathroom tips—based on complaints often made by new owners to builders and architects: **compartmentalized bathrooms** are fine, but the tub and shower should be separate. **Square bathtubs** waste space and are hard to keep clean. **Shower stalls** should be big enough to accommodate a stool. **Exhaust fans** are a must for comfort.

Now's a good time for children's health records to be brought up to date—before the kids are packed off to summer camps, and hot weather activities get into full swing. The pediatrician has a record, but it's wise for parents to keep one at home, too—and send a copy along to camp.

The record should include: Dates of inoculations and "booster" shots, details of operations or serious accidents, allergies or reactions to drugs, any repeated conditions such as colds, earaches, etc. It's a good idea to note blood type and Rh status—in case of an emergency. A suggested **health record form** is included in the informative new book: *When Your Child is Ill*, by Samuel Karelitz, Simon & Schuster, \$4.95.

Remember that children's backyard wading pools need protection from germs just as much as a full-sized swimming pool. A new germicide called Sani-Swim (said to be safe for infants) is available at \$1.49 from the Nutheme Co., 4941 So. Racine Ave., Chicago, Ill.

And for good summer play and exercise, children can jump to their hearts' content on a new **miniature trampoline** that has a special safety handlebar. The Kangaroo Kid measures 36 in. by 24 in. by 10 in.; \$17. Write to Tekay Products, 9140 N. Meadowlark, Milwaukee, Wis.

While you're in France, you might try a new **bird's-eye tour of the chateaux region along the Loire**—by helicopter. With plenty of time and opportunity for camera fans, the 12-passenger Sabena Airlines helicopter tours for 9 hours, including a lunch-stop at a chateau. Price is around \$75.

Yachtsmen can get a new **aluminum boarding ramp** that adjusts to tidal changes and has steps that remain horizontal. Tide-Ride (2012 Purdy Ave., Miami Beach, Fla.) will hook to most cruisers, has six steps, is 5 ft. long with a rise of 54 in., weighs 42 lbs., cost \$300.

And there's a new **pocket-size windmeter** that reads like a thermometer to use aboard any boat. F. W. Dwyer Mfg. Co., Michigan City, Ind.; \$4.95.

Who knows what city will have a major league ball club next year? But one thing sure, is an amusing, instructive new book on the game (just in case)—*How to Watch a Baseball Game*, by Fred Schwed, Harpers, \$2.50.



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He got new Calm and Reassurance for only 77 cents

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This particular story concerns a man, an iron lung and 77¢. It happened just like this:

For months this man listened to the vibrating sounds of one V-belt after another, slipping, flapping and wearing. In the silence of a hospital room...in the helplessness of an iron lung...these sounds took on terrifying significance. The man knew only that should the belt fail, the respirator would fail, too.

Then, a U. S. V-Belt was installed—cost: 77¢.

From that day, the patient has had new calm and reassurance. The motor hums steadily, the belt performs perfectly, with no sign of wear, no *sound* of flapping.

Just "a small incident" involving only 77¢—but it gives us a pretty good feeling about the quality of material and workmanship that goes into U. S. V-Belts (built with electronic controls and new molding methods) and every "U. S." product.

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INDUSTRIES

Not Only the Trucks

Fast shifts in trucking industry make for fewer, bigger lines, bring first steps toward integrated truck-rail-sea-air system.

WITH BANK STATEMENTS and business records in their briefcases, most of them aging and a little anxious, have filed through the doors of the headquarters of Consolidated Freightways, Inc., at Menlo Park, Calif., these last few years. In each case, their business with the company, the nation's third largest common carrier trucker, has been the same.

They have come to seek deals by which Consolidated would buy and merge into its operations the trucking companies that they and their families have built up and run for the last 25 or 30 years. Consolidated, fast expanding its trucking system, has signed acquisition agreements with many of them.

Across the nation, in Miami, Fla., James A. Ryder, head of Great Southern Trucking Co., and of its parent, Ryder System, Inc., has already added to his carrier operations a truck renting system, and a bulk cargo and trailer-carrying ship in service between Florida and Puerto Rico. Some time—a year or two hence—he wants to add an air-freight line to his transportation business.

• **Growing Up**—These two moves in two widely separated companies are clues to major shifts going on inside the trucking industry. Born in the Depression, reared in wartime, it is growing in prosperity into a form of maturity.

The two chief signs of this are (1) the consolidations and mergers that are speeding the growth of the larger truckers, and (2) the testing of a new concept in the industry, a concept that causes truckers to see their business less as an industry in itself, more as a part of the whole transportation industry.

• **Passing Era**—The first change marks the end of a generation in trucking. Thousands of mergers and acquisitions have taken place in the last decade. Nobody knows for sure just how high the total is, but it's probably more than 8,000. Many that have taken place during the last half of that decade have been prompted solely by inheritance tax laws. The men who, with \$500 stakes, set up small trucking outfits in Depression days and watched them grow through war and postwar prosperity until their stakes multiplied a thousandfold, have sold out to spare their families and businesses from the sharp bites of the estate tax collectors.

Others, more recently, have been prompted to sell by the disappearance of easy credit. Too small to interest the bankers, too large to remain profitable without continuing growth, their trucking operations seemed to them a waste of time and effort, especially when other fields opened where they could look for faster gains. So they, too, have sold their interests.

• **New Idea**—The second major change marks the spread in the trucking industry of an idea that is also gaining ground slowly in the headquarters of some railroads and airfreight lines, a few barge lines and shipping companies, and in the offices of the Interstate Commerce Commission. It's the idea that efficient operation of the country's transport system requires the integration of all the different means of moving freight.

The growth of piggybacking of truck trailers on railroad flatcars (BW—Feb. 16 '57, p114) is the biggest, most obvious practical result of the spread of that concept. And one sign that the concept is still gaining is that, under questioning, truckers say more frequently these days, "We're not out to fight the railroads, we'd like to cooperate with them." Such a comment would have been high treason among truckers a couple of years ago.

• **Plenty of Room**—There's no dispute that these changes are signs of maturity in an industry whose trademark since its beginning has been volatile growth and competition. But "maturity" is a relative term. When it's applied to the trucking business, it doesn't mean that the industry is due for a shakeout similar to the one that swept through the appliance industry lately, leaving only a dozen or so companies in business out of the scores that shared the early postwar market.

Trucking's maturity is more kin to the construction industry's. There, a score of large companies lead the bidding for the nation's major construction jobs, and there's still plenty of room for thousands of smaller companies to handle local jobs.

But because the trucking industry is so fractionized, a set of definitions and statistics is necessary before any more generalizations can be made.

• **Split Industry**—Of the 10-million trucks on U.S. highways today, about 3-million are owned and operated by farmers, and another 5½-million are op-

Are Swelling to King Size



erated by private truckers (manufacturers, distributors, stores, and so on). None of these truck operators reports his business activities to the Interstate Commerce Commission. The freight they haul adds to the ton-miles total for the industry, but since they do not operate for revenue, they add nothing to the industry's dollar volume.

Another 1½-million trucks are run on a for-hire basis, but about 1.1-million of these haul commodities, mostly agricultural products, that are exempt from ICC regulation.

That leaves 400,000 trucks operated for hire by common and contract carriers, whose business is subject to ICC regulation. Common carriers—there are about 15,000 of them—serve any and all shippers. Contract carriers—they number about 2,600—haul specific commodities for one or more shippers, but not for the general public.

It's in these last two categories of

truckers that the new maturity and the new concept of the industry are spreading—for these are, after all, the only truckers who are strictly in the business of transportation.

I. Changing With Growth

It has taken these truckers 25 years of struggle, and a high degree of success as a group, to reach this stage.

The greatest numbers of them started their outfits, frequently one-man operations, in the early 1930s. The industry was then under little or no control. Rate wars and fierce competition among the truckers, and between them and the railroads, flourished more wildly than they ever can again. By 1935, the fuss they made produced the beginning of federal control in the form of the Motor Carrier Act, regulating for-hire carriers in interstate commerce.

The following year, the common and

contract carriers hauled around 4-billion ton-miles of freight. By 1939, as the nation climbed out of the Depression, they stepped this up to 16-billion ton-miles.

The story since then is well known. The nation's total freight movement has zoomed from 543-billion ton-miles in 1939 to 1,342-billion ton-miles in 1956. In the same period, trucks of all kinds have doubled their share of total ton-miles, climbing from about 9% of the total in 1939 to about 19% of last year's total. The common and contract carriers' share of the whole freight movement has kept pace; it's up from about 3% of the total in 1939 to more than 6% now. And although these ICC-regulated truckers produce only about one-third of all truckers' share of ton-miles, they collect about \$6-billion a year in revenues. The railroads' total freight revenue last year was only \$3-billion more than that, and the reason

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is that half the tonnage the railroads haul is in low-rated bulk commodities whereas the truckers can concentrate on high-value freight.

Today, the leading truckers are multi-million-dollar enterprises. The half-dozen largest each has a yearly operating revenue of well over \$30-million. The revenues of the top three are each around \$50-million.

• **Plenty of Heat**—But trucking is still a rough-and-tumble business. Costs are high, profits are low. Operating ratios—the percentage of revenues consumed by expenses—average about 95%, leaving little room for misjudgments in management.

Even the biggest carriers can get into trouble and end the year in the red, or close to it. Last year, for instance, Associated Transport, Inc., reported to the ICC that on a gross operating revenue of \$52.6-million—the second highest in the industry—it wound up with a net after-tax operating income of \$14,000.

For reasons like these, bankers and investors long shied away from any significant interest in trucking. Not until after World War II was more than one trucking company publicly financed.

• **New Climate**—In the last few years, the atmosphere has been changing. The fast expansion of the bigger, better-managed trucking lines has attracted investors. And the lines themselves have been working harder to attract more investment, so they can keep their expansion going. Since 1951, some 25 other trucking companies have been O.K.'d by underwriters and have sold stock to the public.

Cautious about handling stocks which they still consider for the most part speculative, underwriters set stern tests for truckers seeking public financing. They won't often spend time on one whose net after taxes is less than \$500,000 a year. Only 20 carriers reported making more than that last year.

Underwriters examine the management closely, too. This is one reason why most of the managements of the rapidly expanding truck lines—those battling to stay in, or move into the dominant group in the next few years—are losing the old aura of cigar-chomping, side-alley businessmen.

Probably the most extreme example of this trend is Consolidated Freightways' transfer of its management headquarters from its operating center in Portland, Ore., to a ranch-style office in a San Francisco suburb. The reason for the move was to bring management closer to the company's bankers and underwriters in San Francisco.

Such offices, where heavy thinking is done away from the pressures of day-to-day operations, are not built just to impress the bankers. In their growth, the major truck lines are running head-on into the problems of control that

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"... advances in management and engineering have gained truckers a larger share of the market ..."

TRUCKING starts on p. 168

affect any fast expanding business.

- **Researchers**—The nation's largest trucker, Pacific Intermountain Express Co., has set up a two-man operations research team at its Oakland (Calif.) headquarters. The team's long-range aim is to build an integrated information system. One of the most pressing projects is to establish an equipment maintenance and replacement policy. The researchers suspect the company is overanxious to keep its trucks rolling without interruption and could easily spend less on maintenance.

They're also trying to work out a profit-and-loss statement for each PIE terminal, a difficult accounting job.

- **Trucks**—These management methods out of the latest textbooks are being applied to operations conducted with equipment that, so far as the larger truck lines go, is just as new.

PIE, for example, spends 95% of its equipment replacement money not to get worn-out trucks and trailers out of service but to take advantage of the newest developments in trailer design and tractor power. It has bought more than 1,500 of its 2,189 pieces of line-haul equipment (tractors, trailers, refrigerator vans, and so on) since 1954.

The greatest pressures behind this high rate of obsolescence are the limitations imposed by states on trucks' length, width, and height. The truckers struggle to get maximum trailer capacity within those limitations. They have scored plenty of success.

- **Designs**—In 1944, trailers 35 ft. long weighed 13,700 lb., had a capacity of 1,870 cu. ft. Some 40-ft. trailers produced last year weigh 7,900 lb., have a capacity of 2,900 cu. ft. Substitution of aluminum for steel brought much of the gain, but not all. Air suspension systems dispensed with the need for heavy steel-leaf springs.

Massive, heavy-duty tractors used for long-haul runs have been undergoing some of the same changes. One weighing 17,800 lb. and made in 1945 has been replaced by a new model weighing 5,300 lb. less. Stepped-up horsepower cuts fuel consumption by reducing gear shifting—and to gain the savings the larger truckers must replace their lower-powered tractors.

II. Pinches and Pressures

Steadily, these advances in management and equipment engineering have gained the truckers a larger share of the transportation market. Just as

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steadily, they have helped to drive up the truckers' capital costs.

PIE's statistics show this clearly. The average cost of trailers it bought between 1945 and 1949 was \$2,719. Replacements bought in 1952 averaged \$4,687 apiece; in 1955, \$8,076 each. Last year, as the company started adding refrigerator vans, the average cost jumped to \$10,427. Tractors, which ran to an average of \$7,000 between 1945 and 1949, last year cost \$19,000 apiece. Inflation caused part of the rise, but equipment improvements contributed heavily.

Labor costs are also leaping. In 1950, the average pay for PIE's 1,500 employees was \$3,769; last year, the company's 4,000 employees averaged \$6,348 a year. The line's report to the ICC last year listed 36 officers and executives getting \$10,000 a year or more—and 43 line-haul drivers who also topped \$10,000.

• **Doubtful Answer**—There's one immediate answer for truckers confronted with leaping costs like these: They can raise their rates. They have done this repeatedly in the last 10 years.

But now the ICC is waving warning flags at the common and contract truckers. "Private carriers," says the commission, "have advanced relatively more than carriers subject to our jurisdiction."

• **Shift**—The warning brings echoes from within the industry itself. Says James Ryder, head of both Great Southern Trucking Co. and Ryder Truck Rental System, Inc.: "Perhaps our truck leasing service has the greatest future."

In his own organization, Ryder has witnessed the shift of some of his customers from clients of his trucking company to clients of his truck leasing service. Among the latest to shift have been a number of Florida-based manufacturers of aluminum jalousie windows. Last year, Ryder's own Great Southern trucks hauled components from the Midwest to Florida, and took finished windows back to the North. This year, trucks he has leased to the manufacturers are doing the hauling jobs.

Elsewhere comes further confirmation of the trend toward the growing use of fleets of private trucks. One recent survey of more than 300 businesses showed that two-thirds of them operate their own trucks and more plan to do so soon.

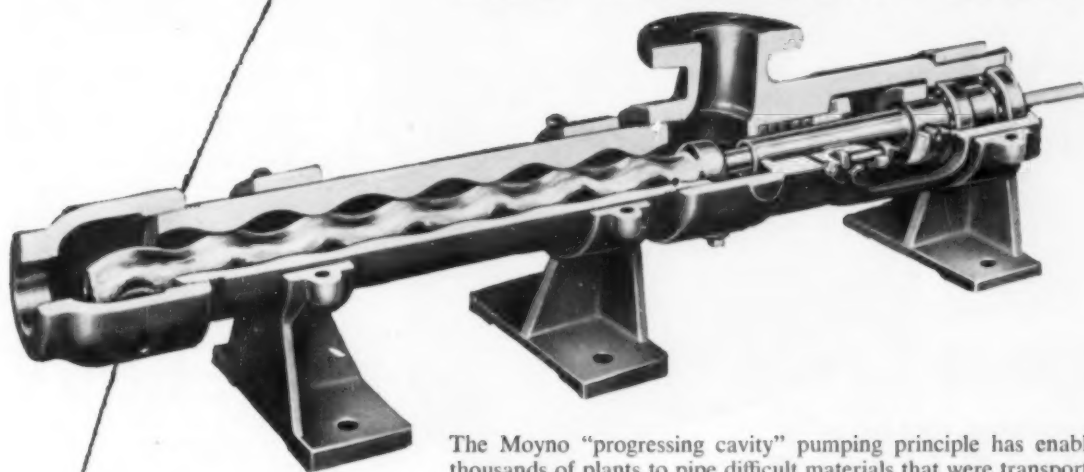
• **Tax Burden**—The common and contract carriers do have one strike against them from the start. They must add to their freight bills a 3% federal transportation tax, which private carriers do not have to pay.

• **Railroad Pressure**—Competition from the railroads is getting warmer, too. For years, railroads have owned trucks to provide auxiliary service. Now the

*from abrasive slurries
to delicate foods...*

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The Moyno "progressing cavity" pumping principle has enabled thousands of plants to pipe difficult materials that were transported by hand and other expensive means. Moyno is the only pump that can handle many abrasives, pastes, slurries, chemicals, foods, suspended solids, etc., without foaming, aerating, crushing or excessive pump wear.



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Moyno Pumps are available in capacities up to 500 gpm and pressures up to 1000 psi.

Examine your processing methods. No doubt there are several places where Moyno Pumps can drastically cut costs. Ask us, we'll give you a frank answer. Send us an outline of your problem today! Write for Bulletin 30-BZ



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rails are taking the emphasis off "auxiliary," and are seeking to give complete truck service to some of their routes.

Within the next couple of years the core of the dispute between truckers and railroads is due to come to a critical point. Today, railroads must get ICC approval before they make changes in their rates. For the future, they want more freedom. The truckers oppose this fervently, and so does the ICC, on the grounds that it would start rate wars and strain the whole structure of the transportation system.

• **Credit Pinch**—For the smaller truckers, outside competition is one of the least of their current troubles. Their chief worry is financing of new equipment. Too small to swing a substantial line of credit from a bank these days, they must finance much of their equipment purchases through equipment manufacturers' credit organizations. In the pinch on credit, they're having to pay steep discounts to get this financing, and many are, in effect, paying 7% or 8% for their loans.

To help them, the American Trucking Associations are working on a plan for a central credit organization that might be able to get bank loans for the smaller truckers collectively at a better rate than they can get individually.

Of all these problems, the cost squeeze is probably the most pressing. In searching for ways around it, some truckers are coming up with that new concept of their business as a part of the whole transportation industry.

III. Links to a Wider System

Last year, the big Midwestern trucking firm of Riss & Co. signed agreements with the Pennsylvania RR and Missouri-Kansas-Texas RR, linking a substantial part of its operations with theirs in piggybacking of trailers by flatcar. The prime reason for the move was to cut costs. The agreements, says Pres. Robert Riss, also went a long way to promote the integrated national transportation system that the ICC is trying to foster.

The agreements seemed to work well at the start. Now the honeymoon is over. Says Robert Riss: "Our volume with the railroads is down 25% from the beginning of this year. We had no sooner got the system working well than the railroads started selective rate cutting in virtually all the lines of freight that were moved in our piggybacked trailers."

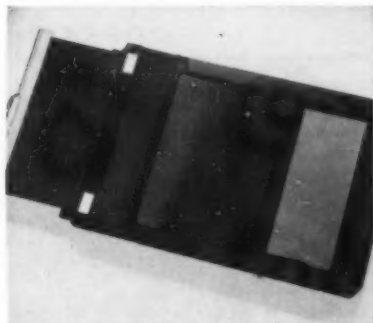
Now Riss is putting the company's main emphasis on trucking lines of freight in which it has a major advantage over the railroads—mostly frozen foods. For a start, the company has bought 553 new refrigerator trailers in the last few months.

But Riss says he has no intention

take
it
in
color



and you put Synthane laminated plastics to work



Slide for cut film holder—made from Synthane sheet because Synthane is opaque to infra-red rays.

At first glance the connection between color photography and Synthane laminated plastics may seem obscure. Actually, Synthane has long been at home in the manufacture and processing of film and in the developing of the finished picture.

Many types of rolls, loop sticks, and structural parts made of Synthane are used by the film manufacturer. Racks, film sprockets, reels and rollers employ Synthane in developing processes. In the infancy of color pictures (and ever since), racks and reels made of Synthane proved to be exactly what were needed to resist developing solutions, prevent film fogging through contamination. Film holder slides and

various parts for cameras are other uses of Synthane in photography.

The photographic industry needs Synthane for its unique combination of properties. Resistance to moisture and chemicals, non-fogging qualities, its hard, smooth surface are all important characteristics. Synthane is tough, light in weight (half the weight of aluminum) and easily machined. These and many other chemical, electrical and mechanical properties make Synthane valuable throughout the length and breadth of industry.

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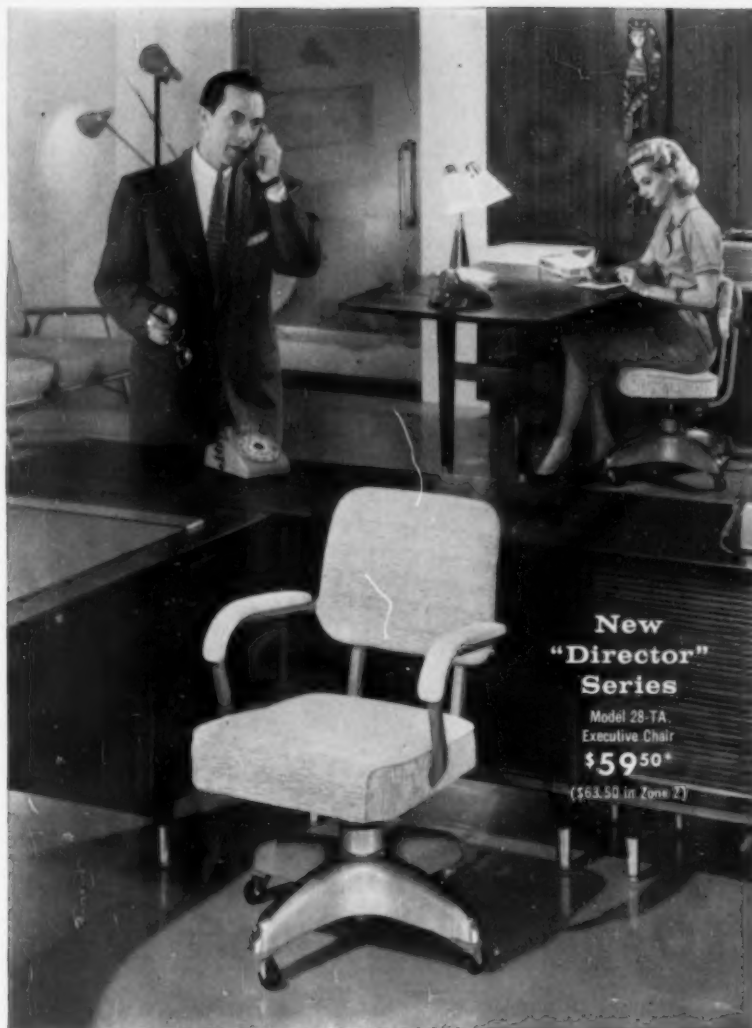
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*All prices shown are for DuPont Fabrilite upholstery; other fabrics slightly higher. (Zone 2—Texas and 11 Western States)

"... the further integration goes, says ICC, the more costs are bound to come down . . ."

TRUCKING starts on p. 168

of abandoning the agreements with the railroads. Piggybacking still helps to cut the truck line's costs, and there's still a chance that cooperation through piggybacking will soften the fight over rates.

Riss' troubles with piggybacking agreements haven't stopped at least a score of other truckers—mostly smaller ones—from making similar arrangements with railroads.

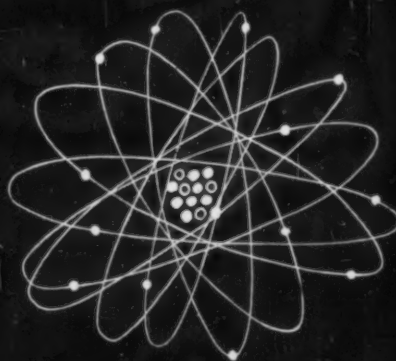
• **Broader Fields**—In Florida, James Ryder is fighting the truckers' cost battle along broader lines. While expanding his truck leasing system through acquisitions northwards into Pennsylvania, west into New Mexico, and northwest into Colorado, he has been connecting his Great Southern Trucking Co. with other means of transportation.

Two months ago he signed a piggybacking agreement with Florida East Coast Ry. for movement of trailers by rail between Jacksonville and Miami. It's a one-year experimental agreement, and under it eight trailers a day are being hauled by flatcar between the two cities. His truck renting service is aiding his trucking company's competition through an agreement leasing trailers and tractors to Atlantic Coast Line RR.

A 5,500-ton ship Ryder has chartered is hauling Great Southern trailers back and forth between Puerto Rico and Florida, and he is negotiating now to charter at least one more ship for the same service. He has loose transshipping agreements with several airfreight carriers, and is negotiating for a closer agreement with one of them so he can offer shippers a precisely scheduled, same-day service.

• **Stronger Links**—Ryder hopes that in a few years he will be able to buy control of an airfreight carrier. He believes the present climate at the ICC gives him a good chance of winning approval of such a deal. But the big barrier probably will be the Civil Aeronautics Board, which has long opposed permitting any road or rail carrier to gain control of an air carrier.

All these are moves that the ICC is trying to foster. It is steadily preaching the theme that an efficient transport system requires the integration of truck, rail, airfreight, and shipping services. The further this movement goes, it says, the more costs are bound to come down. At least some truckers, pinched harder by the cost squeeze, are beginning to agree. **END**



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Atomic power in Caesar's day?

Certainly!

It was there, in the ground, in the air and water. It always had been. There are no more "raw materials" today than there were when Rome ruled the world.

The only thing new is knowledge . . . knowledge of how to get at and rearrange raw materials. Every invention of modern times was "available" to Rameses, Caesar, Charlemagne.

In this sense, then, we have available *today* in existing raw materials the inventions that can make our lives longer, happier, and inconceivably easier. We need only *knowledge* to bring them into reality.

Could there possibly be a better argument for the strengthening of our *sources* of knowledge—our colleges and universities? Can we possibly deny that the welfare, progress—indeed the very *fate*—of our nation depends on the quality of knowledge generated and transmitted by these institutions of higher learning?

It is almost unbelievable that a society such as ours, which has profited so vastly from an accelerated accumulation of knowledge, should allow anything to threaten the wellsprings of our learning.

Yet this is the case

The crisis that confronts our colleges today threatens to weaken seriously their ability to produce the kind of graduates who can assimilate and carry forward our rich heritage of learning.

The crisis is composed of several elements: a salary scale that is driving away from teaching the kind of mind *most qualified* to teach; overcrowded classrooms; and a mounting pressure for enrollment that will *double* by 1967.

In a very real sense our personal and national progress depends on our colleges. They *must* have our aid.

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Adding Depth to a River



MUCK sucked up by dredges in the upper Delaware is dumped on the Jersey shore. The channel is being deepened to 40 ft. between Philadelphia and Trenton.

The U. S. Steel ore boat shown above has to navigate the Delaware River above Philadelphia half empty because the river only has a depth of 25 ft.

Dredging operations began last year, but not until last week did it appear that the federal government would underwrite the job of digging the 40-ft. channel required for shipping needs.

SINCE LAST NOVEMBER, dredges have been sucking up muck from the bottom of the Delaware River (pictures) as a start on a project to deepen the river channel from Philadelphia to Trenton, N. J. This stretch of the river now cannot accommodate fully loaded ore boats. The work was begun despite a running controversy over how deep the channel should be and who should pay for digging it.

Now it seems certain the channel

will be 40 ft. deep and will be paid for by the federal government, without any contribution from the chief beneficiary, U.S. Steel Corp. That's the way Congress wants it done. And last week the House Appropriations Committee stood its ground against the Administration's plan for a 35-ft. interim channel, pending settlement of the cost-sharing issue.

The committee voted the \$9-million Pres. Eisenhower asked for continuation of dredging operations, but stipulated that a 40-ft. channel be dug at federal expense.

- **The Issue**—In its battle with Congress and local interests in Pennsylvania and New Jersey, the Administration contends that 40-ft. channel mainly would benefit U.S. Steel Corp., whose Fairless Works sits on the river's edge at Morrisville, Pa. The steel plant was built with the idea that ocean-going boats from Venezuela would deliver iron ore directly to the plant—even though the river was only 25 ft. deep and fully laden ore carriers required a channel of 40 ft. Since a depth of 35 ft. is considered adequate for normal shipping needs on the river, the Administration insists that the main beneficiaries of the deeper channel pay half the cost of digging the extra 5 ft. This falls in with Eisenhower's belief that the federal government and local interests should be financial partners in public developments in which substantial local benefits are involved.

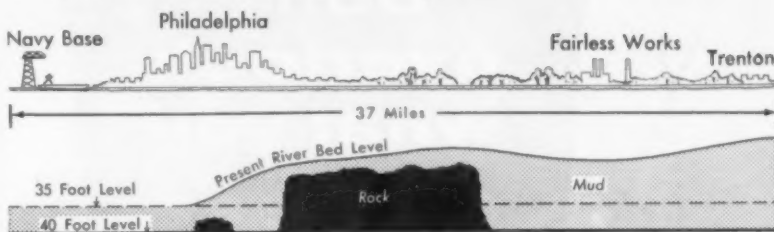
In his budget message of January, 1956, the President asked for \$6-million for fiscal 1957 to start an interim project of 35 ft. depth. Congress went along with him, although it had turned down a proposal for a 35-ft. channel the year before. But the House Appropriations Committee action last week in authorizing a 40-ft. channel at federal expense indicates Congress is fully determined to have its own way.

- **Committee Action**—Actually the advocates of the 40-ft. channel didn't get as much as they asked for from the House committee. In his budget, the President requested \$9-million for the 35-ft. interim channel; the committee voted this sum for a 40-ft. channel. Pennsylvania and New Jersey interests wanted the committee to O.K. \$16.5-million so a real start could be made on the project.

As things stand now, mud removal will continue this year and next. Rock excavation will begin in 1959. At best, the complete job will take five years. But if appropriations come in dribs and drabs, it could take 14 years.

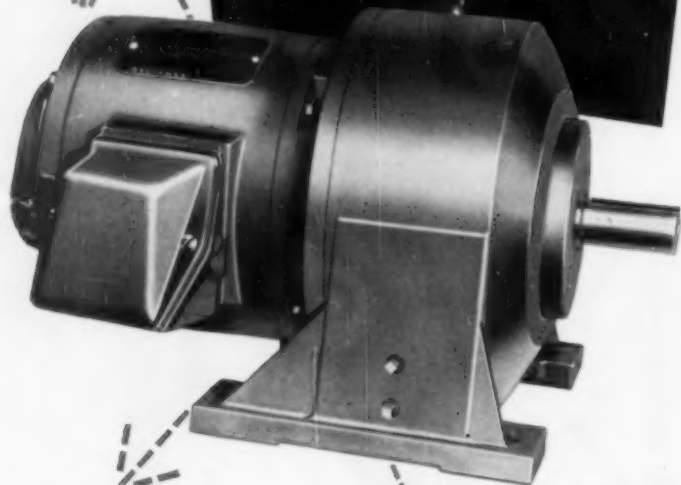
- **Economy Pitch**—Proponents of the deeper channel talked economy to the House committee in trying to win approval for a 40-ft. channel and for a larger appropriation. They argued that

This is what's being dredged

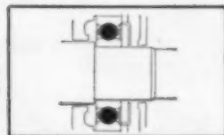


DREDGES now are scooping mud and silt from the river bed. After this is done, the rock ledge that remains will have to be cut away (cross-section above).

**Don't
overlook
what you
can't see**



You can't always see
what makes a gear-
motor outstanding.
It's the attention
paid to small design
details that makes the
difference. Here are
a few of the details
that make the New
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**"... the Senate may come
across with more than \$9-
million for the channel
project ..."**

STORY starts on p. 178

to slice away rock to make way for a 35-ft. channel and then come back at a later date and cut away another 5 ft. (see cross-section on page 179) would add to the over-all cost of the project. A 40-ft. channel dug in one operation is expected to cost \$105-million. Doing the work in two stages would cost \$112.5-million. And, of course, the further work is stretched out, the greater the chances are that construction costs will rise. The 1953 estimate for a 40-ft. channel was \$94-million.

The committee was sympathetic and quite anxious to save money in the long run by completing the project in one operation. Spending more money immediately was something else again, and it refused to up the figure suggested by the President. Significantly, however, it did not cut it either, as it has done in regard to so many other Administration budget requests.

Now the funds bill goes to the floor of the House and then to the Senate. Congressional approval is expected. And there's still a good chance the Senate may come across with more than \$9-million for the channel project for fiscal '58. Two of the project's strongest supporters—one in each party—sit in the Senate. They are Pennsylvania's Edward Martin, Republican, and Joseph S. Clark, Jr., Democrat.

• **How It Started**—The tussle over deepening the Delaware River above Philadelphia dates back to 1950, the year U.S. Steel purchased 3,800 acres just below Morrisville, Pa., for the Fairless Works. The river had a depth of 25 ft. from Philadelphia to Trenton. Below Philadelphia, it had a 40-ft. channel.

The announcement of the U.S. Steel plant breathed new life into the area around Morrisville. It was expected that smaller steel-consuming plants would cluster around the giant Fairless Works. And apparently, U.S. Steel expected the federal government would deepen the river channel so it could handle ocean-going ore boats by the time it had completed its new plant.

The first expectation has not been fully realized. The Fairless Works never attracted as many ancillary plants as some people hoped. The new industry that did locate in the area didn't require river transportation.

And U.S. Steel has never been able to run fully laden ore carriers right up to the Fairless Works. Instead, its ore boats have been forced to "top off"

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part of their loads at Philadelphia for
shipment by rail to the plant. The ships
then proceed upstream to Morrisville
half-full.

• Political Dispute—At Congress' re-
quest, the Army Corps of Engineers' district engineer in Philadelphia filed a
report in 1953 on the advisability of
deepening the river. He recommended
a 40-ft. channel from Philadelphia up
the river 23.5 mi. to the head of New-
bold Island (above the U. S. Steel plant)
and a 35-ft. channel from there to
Trenton. He also said the benefits of
the improvement would be national
rather than local and that the cost
should be borne by the federal govern-
ment without any help from U. S. Steel.
The district engineer at New York
concurred. But later that year, Lt. Gen.
Samuel D. Sturgis, Chief of Army
Engineers, reported that "use of depths
greater than 35 ft. now or in the fore-
seeable future will be confined to a
single company." So the Administra-
tion urged that the channel be deep-
ened to 40 ft. only if U. S. Steel or
other local interests put up half the
additional cost—then about \$18-million
—for the extra 5 ft.

But Congress went ahead in Novem-
ber, 1954, and authorized a 40-ft.
channel. Cost-sharing, said the Senate
Public Works Committee, "would be
inconsistent with the national policy
followed for many years."

• Work Starts—Pres. Eisenhower re-
fused to be badgered. In making his
budget request for fiscal 1956, he asked
for \$6-million to start work on a 35-ft.
channel. Congress said no. The follow-
ing year the President again asked for
\$6-million for a 35-ft. channel, but
didn't preclude the possibility of deep-
ening it another 5 ft. at a later date.
This time Congress assented and dredg-
ing began last November. That's where
the matter stood until the House Ap-
propriations Committee authorized new
funds specifically for a 40-ft. channel,
built in one stage.

• New Developments—One factor in
the House committee's action un-
doubtedly was the opening of another
big plant on the upper Delaware—National
Gypsum's Co.'s new facility in
Burlington Township, N. J. Operations
at the plant began last year. The com-
pany built three specially designed ore
carriers, drawing 40 ft., to haul in rock
gypsum from Nova Scotia. The boats
also are having to navigate the present
channel with partial loads.

In addition, two other steel con-
cerns, Barium Steel Corp.'s subsidiary,
Phoenix Iron & Steel Co., and National
Steel Co., have bought land on
New Jersey banks of the river.

These developments make the river
project less exclusively a benefit for
U. S. Steel—and therefore politically
more palatable. END

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The Push Behind Cost Inflation

Nine months ago, *BUSINESS WEEK* pointed to a curious phenomenon: The money supply was showing less than normal growth, but both wholesale and retail price indexes were moving upward. "Is this," we asked, "a picture of inflation?" (BW—Sep. 15 '56, p67). And we suggested that, if this could indeed be called inflation, it was a significantly different kind of inflation from that customarily described in the past as "too much money chasing too few goods." It is true that during World War II and the early postwar years, the money supply was expanded enormously, but it has scarcely grown at all in the past couple of years. Instead, the inflationary pressure now seems to originate from the cost side, particularly labor costs.

In recent months, recognition of the peculiar character of so-called "cost inflation" has become widespread, and the argument over what causes it has become the hottest single issue for businessmen, labor leaders, economists, and government officials. Statistical studies laying out the complex relations among wages, costs, productivity, and prices have become front-page news (BW—Jun. 1 '57, p132).

In this rapidly mounting debate, there are a few basic points to keep in mind:

- Demonological conclusions that try to pin the blame on any single group in the economy for upward creeping prices won't stand up. Wage demands have helped push up prices in many instances. But the whole postwar pattern of wage boosting would have been very different if employers had not been pretty sure that they could pass the wage boosts along to the public in the form of higher prices.

- Through the postwar years, a changing mix of direct and indirect government controls and generally cautious business pricing policies has produced a long-drawn-out adjustment of the price-and-wage level to the greatly expanded supply of money and credit. The size of the money supply—and the room for speeding up velocity—had made wage and price hikes possible; and the tightness of the labor market, the bargaining strength of unions, and the strong over-all demands of consumers, government, and business made them inevitable.

- The continuation of this gradually rising price trend is in large measure due to massive government spending, mainly to give us military strength. Heavy government outlays have helped to keep business spending very high and the labor market unusually tight. Through most of the postwar period, too many jobs have been chasing too few people.

- The economy's vast expansion has eliminated any real danger of runaway inflation that might have existed immediately after the war. In real terms, we are now turning out more than 40% more goods and services than in 1946, and could boost output a

lot higher if we really had to; manufacturing capacity has in fact increased 100% since 1946.

- Calling the present U.S. price trend "inflation"—a term that, in most people's minds, still seems to connote something like the galloping German inflation after World War I—may be to use a dangerous misnomer. For it may breed a dangerously emotional response to relatively slow upward price adjustments that are virtually inescapable in a period of prosperity such as we have enjoyed. In any case, the over-all upward price creep masks a highly mixed set of trends in different industries. In fields like textiles, electric appliances, in raw materials like lead and zinc, the trend has actually been toward price softening.

In an unorthodox "inflation" such as this one, with highly mixed price and production trends in many fields, are orthodox over-all anti-inflation policies, especially tight money, sufficient to deal with the problem? The experience of the past year clearly suggests they are not. It begins to look as though the great need is for a more efficient set of techniques to cope with diverse and unbalancing price movements within an upward creeping pattern—a trend that may curb economic growth and ultimately induce a sharp recession.

The Hard Sell

The Russians have hinted strongly that they'd like a reciprocal arrangement for us to use Soviet radio and TV time in return for their using our air. The idea is provocative, but we would want as good a listening and viewing period there as they would get here; we would want networks in the two countries reaching approximately the same number of set owners. There are other such details to be dealt with, but the whole idea is well worth trying—on one condition.

That condition is that we are completely free to use our time on the Russian air in any way we want. They will, of course, be accorded the same privilege.

On those terms, if we were running the program we'd exclude all politicians, especially those who think they're statesmen. We'd sign Betty Furness for an intensive course in the Russian language and turn her loose to demonstrate to Russia's housewives the marvels of a modern American home, including that coming stove that will play "Tenderly" when the roast is done. Then we'd throw in all the best commercials Madison Avenue can produce for the fabulous cornucopia of consumers goods turned out by American industry.

Handled that way, we're pretty sure the Soviets would have cause to regret that they'd bruited the idea.

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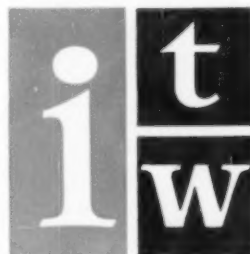
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